# FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO

TPCO America Corporation

AUTHORIZING THE OPERATION OF

TPCO America
Steel Works

LOCATED AT

San Patricio County, Texas

Latitude 27° 55' 7" Longitude 97° 16' 1"

Regulated Entity Number: RN106224447

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site and emission units listed in this permit. Operations of the site and emission units listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site and emission units authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site and emission units.

Permit No: O3660 Issuance Date: _____

_____

For the Commission

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## General Terms and Conditions

The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), 30 TAC § 122.145 (Reporting Terms and Conditions), and 30 TAC § 122.146 (Compliance Certification Terms and Conditions).

In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment.

If the permit holder chooses to demonstrate that this permit is no longer required, a written request to void this permit shall be submitted to the Texas Commission on Environmental Quality (TCEQ) by the Responsible Official in accordance with 30 TAC § 122.161(e). The permit holder shall comply with the permit's requirements, including compliance certification and deviation reporting, until notified by the TCEQ that this permit is voided.

The permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit.

All reports required by this permit must include in the submittal a cover letter which identifies the following information: company name, TCEQ regulated entity number, air account number (if assigned), site name, area name (if applicable), and Air Permits Division permit number(s).

## Special Terms and Conditions:
## Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting

1. Permit holder shall comply with the following requirements:

    A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.

    B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.

C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.

D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.

E. Emission units subject to 40 CFR Part 63, Subpart YYYYY as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, §113.1340 which incorporates the 40 CFR Part 63 Subpart by reference.

2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):

A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements

B. Title 30 TAC § 101.3 (relating to Circumvention)

C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ

D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ

E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)

F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)

G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)

H. Title 30 TAC § 101.221 (relating to Operational Requirements)

I. Title 30 TAC § 101.222 (relating to Demonstrations)

J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)

3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:

A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1 , shall not exceed 20% opacity averaged over a six-minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:

(i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)

(ii) Title 30 TAC § 111.111(a)(1)(E)

(iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)

(iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and $NO_x$, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive ventilation, such as plumbing vents; or vent emissions from any other source that does not obstruct the transmission of light. Vents, as specified in the "Applicable Requirements Summary" attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:

(1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter.

(2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum required value does not constitute creation of an alternative fuel.

(3) Records of all observations shall be maintained.

(4) Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(5) Compliance Certification:

(a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).

(b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation

on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

(c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.

B. For visible emissions from a building, enclosed facility, or other structure; the permit holder shall comply with the following requirements:

(i) Title 30 TAC § 111.111(a)(7)(A) (relating to Requirements for Specified Sources)

(ii) Title 30 TAC § 111.111(a)(7)(B)(i) or (ii)

(iii) For a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source subject to 30 TAC § 111.111(a)(7)(A), complying with 30 TAC § 111.111(a)(7)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and $NO_x$, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:

(1) An observation of visible emissions from a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source which is required to comply with 30 TAC § 111.111(a)(7)(A) shall be conducted at least once during each calendar quarter unless the air emission source or enclosed facility is not operating for the entire quarter.

(2) Records of all observations shall be maintained.

(3) Visible emissions observations of air emission sources or enclosed facilities operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of air emission sources or enclosed facilities operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each emissions outlet in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each emissions

outlet during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(4) Compliance Certification:

(a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(7) and (a)(7)(A)

(b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(7)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader

C. For visible emissions from all other sources not specified in 30 TAC § 111.111(a)(1), (4), or (7); the permit holder shall comply with the following requirements:

(i) Title 30 TAC § 111.111(a)(8)(A) (relating to Requirements for Specified Sources)

(ii) Title 30 TAC § 111.111(a)(8)(B)(i) or (ii)

(iii) For a source subject to 30 TAC § 111.111(a)(8)(A), complying with 30 TAC § 111.111(a)(8)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and $NO_x$, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:

(1) An observation of visible emissions from a source which is required to comply with 30 TAC § 111.111(a)(8)(A) shall be conducted at least once during each calendar quarter unless the source is not operating for the entire quarter.

(2) Records of all observations shall be maintained.

(3) Visible emissions observations of sources operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of sources operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each source in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each source during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(4) Compliance Certification:

(a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(8) and (a)(8)(A)

(b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(8)(B) as soon as practicable, but

no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

D. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.

E. For emission units with contributions from uncombined water, the permit holder shall comply with the requirements of 30 TAC § 111.111(b).

F. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:

(i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)

(ii) Sources with an effective stack height ($h_e$) less than the standard effective stack height ($H_e$), must reduce the allowable emission level by multiplying it by $[h_e/H_e]^2$ as required in 30 TAC § 111.151(b)

(iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)

4. Permit holder shall comply with the following 30 TAC Chapter 115, Subchapter C requirements:

A. When filling stationary gasoline storage containers with a nominal capacity less than or equal to 1,000 gallons at a Stage I motor vehicle fuel dispensing facility, the permit holder shall comply with the following requirements specified in 30 TAC Chapter 115, Subchapter C:

(i) Title 30 TAC § 115.222(3) (relating to Control Requirements), as it applies to liquid gasoline leaks, visible vapors, or significant odors

(ii) Title 30 TAC § 115.222(6) (relating to Control Requirements)

(iii) Title 30 TAC § 115.224(1) (relating to Inspection Requirements), as it applies to liquid gasoline leaks, visible vapors, or significant odors

5. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:

A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)

B. Title 40 CFR § 60.8 (relating to Performance Tests)

C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)

D. Title 40 CFR § 60.12 (relating to Circumvention)

E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)

F. Title 40 CFR § 60.14 (relating to Modification)

G. Title 40 CFR § 60.15 (relating to Reconstruction)

H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)

6. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.

7. For each gasoline dispensing facility, with a throughput of less than 10,000 gallons per month as specified in 40 CFR Part 63, Subpart CCCCCC, the permit holder shall comply with the following requirements (Title 30 TAC, Subchapter C, § 113.1380 incorporated by reference):

A. Title 40 CFR § 63.11111(e), for records of monthly throughput

B. Title 40 CFR § 63.11111(i), for compliance due to increase of throughput

C. Title 40 CFR § 63.11113(c), for compliance due to increase of throughput

D. Title 40 CFR § 63.11115(a), for operation of the source

E. Title 40 CFR § 63.11116(a) and (a)(1) - (4), for work practices

F. Title 40 CFR § 63.11116(b), for records availability

G. Title 40 CFR § 63.11116(d), for portable gasoline containers

## Additional Monitoring Requirements

8. For units EAF, EBS, LSTBS, and LWS, the permit holder shall comply with the compliance assurance monitoring requirements, as specified in the attached "CAM Summary," within 180 days from the unit's initial operation date. This "CAM Schedule" requires the permit holder to install, test, or perform final verification of the operational status of the monitoring, contained in the attached "CAM Summary," within 180 days of the unit's initial operation date.

9. Unless otherwise specified, the permit holder shall comply with the compliance assurance monitoring requirements as specified in the attached "CAM Summary" upon issuance of the permit. In addition, the permit holder shall comply with the following:

   A. The permit holder shall comply with the terms and conditions contained in 30 TAC § 122.147 (General Terms and Conditions for Compliance Assurance Monitoring).

   B. The permit holder shall report, consistent with the averaging time identified in the "CAM Summary," deviations as defined by the deviation limit in the "CAM Summary." Any monitoring data below a minimum limit or above a maximum limit, that is collected in accordance with the requirements specified in 40 CFR § 64.7(c), shall be reported as a deviation. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

   C. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time specified in the "CAM Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances in order to avoid reporting deviations. All monitoring data shall be collected in accordance with the requirements specified in 40 CFR § 64.7(c).

   D. The permit holder shall operate the monitoring, identified in the attached "CAM Summary," in accordance with the provisions of 40 CFR § 64.7.

   E. The permit holder shall comply with either of the following requirements for any particulate matter capture system associated with the control device subject to CAM. If the results of the following inspections indicate that the capture system is not working properly, the permit holder shall promptly take necessary corrective action:

      (i) Once per year the permit holder shall inspect any fan for proper operation and inspect the capture system used in compliance of CAM for cracks, holes, tears, and other defects; or

(ii) Once per year, the permit holder shall inspect for fugitive emissions escaping from the capture system in compliance of CAM by performing a visible emissions observation for a period of at least six minutes in accordance with 40 CFR Part 60, Appendix A, Test Method 22.

F. The permit holder shall comply with the requirements of 40 CFR § 70.6(a)(3)(ii)(A) and 30 TAC § 122.144(1)(A)-(F) for documentation of all required inspections.

G. Start of operation of the monitoring specified in the "CAM Summary" after the 180 day "CAM Schedule" shall be reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

10. The permit holder shall comply with the periodic monitoring requirements as specified in the attached "Periodic Monitoring Summary" upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time specified in the "Periodic Monitoring Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

**New Source Review Authorization Requirements**

11. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule, standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:

A. Are incorporated by reference into this permit as applicable requirements

B. Shall be located with this operating permit

C. Are not eligible for a permit shield

12. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.

13. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, safety data sheets (SDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

**Compliance Requirements**

14. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.

15. Use of Discrete Emission Credits to comply with the applicable requirements:

    A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:

        (i) Title 30 TAC Chapter 115

        (ii) Title 30 TAC Chapter 117

        (iii) If applicable, offsets for Title 30 TAC Chapter 116

        (iv) Temporarily exceed state NSR permit allowables

    B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:

        (i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)

        (ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability

requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4

(iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)

(iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122

(v) Title 30 TAC § 101.375 (relating to Emission Reductions Achieved Outside the United States)

## Permit Location

16. The permit holder shall maintain a copy of this permit and records related to requirements listed in this permit on site.

## Permit Shield (30 TAC § 122.148)

17. A permit shield is granted for the emission units, groups, or processes specified in the attached "Permit Shield." Compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements listed in the attachment "Permit Shield." Permit shield provisions shall not be modified by the executive director until notification is provided to the permit holder. No later than 90 days after notification of a change in a determination made by the executive director, the permit holder shall apply for the appropriate permit revision to reflect the new determination. Provisional terms are not eligible for this permit shield. Any term or condition, under a permit shield, shall not be protected by the permit shield if it is replaced by a provisional term or condition or the basis of the term and condition changes.

## Attachments

**Applicable Requirements Summary**

**Additional Monitoring Requirements**

**Permit Shield**

**New Source Review Authorization References**

## Applicable Requirements Summary



Note: A "none" entry may be noted for some emission sources in this permit's "Applicable Requirements Summary" under the heading of "Monitoring and Testing Requirements" and/or "Recordkeeping Requirements" and/or "Reporting Requirements." Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (30 TAC § 122.144), Reporting Terms and Conditions (30 TAC § 122.145), and Compliance Certification Terms and Conditions (30 TAC § 122.146) continue to apply.

## Unit Summary

| Unit/Group/ Process ID No. | Unit Type | Group/Inclusive Units | SOP Index No. | Regulation | Requirement Driver |
|---|---|---|---|---|---|
| DHS | STEEL PLANT UNIT | N/A | 60AAa-2 | 40 CFR Part 60, Subpart AAa | No changing attributes. |
| DIEULD | LOADING/ UNLOADING OPERATIONS | N/A | R5211-1 | 30 TAC Chapter 115, Loading and Unloading of VOC | No changing attributes. |
| EAF | STEEL PLANT UNIT | N/A | 60AAa-1 | 40 CFR Part 60, Subpart AAa | No changing attributes. |
| EAF | STEEL PLANT UNIT | N/A | 63YYYYY-1 | 40 CFR Part 63, Subpart YYYYY | No changing attributes. |
| EBS | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | N/A | R1151-2 | 30 TAC Chapter 111, Nonagricultural Processes | No changing attributes. |
| EBS | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | N/A | R1111-2 | 30 TAC Chapter 111, Visible Emissions | No changing attributes. |
| GASULD | LOADING/UNLOADIN G OPERATIONS | N/A | R5211-2 | 30 TAC Chapter 115, Loading and Unloading of VOC | No changing attributes. |
| LSTBS | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | N/A | R1151-2 | 30 TAC Chapter 111, Nonagricultural Processes | No changing attributes. |

## Unit Summary

| Unit/Group/ Process ID No. | Unit Type | Group/Inclusive Units | SOP Index No. | Regulation | Requirement Driver |
|---|---|---|---|---|---|
| LSTBS | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | N/A | R1111-2 | 30 TAC Chapter 111, Visible Emissions | No changing attributes. |
| LWS | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | N/A | R1151-1 | 30 TAC Chapter 111, Nonagricultural Processes | No changing attributes. |
| LWS | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | N/A | R1111-1 | 30 TAC Chapter 111, Visible Emissions | No changing attributes. |
| MSB | STEEL PLANT UNIT | N/A | 60AAa-3 | 40 CFR Part 60, Subpart AAa | No changing attributes. |
| MSB | STEEL PLANT UNIT | N/A | 63YYYYY-3 | 40 CFR Part 63, Subpart YYYYY | No changing attributes. |
| OILULD | LOADING/ UNLOADING OPERATIONS | N/A | R5211-1 | 30 TAC Chapter 115, Loading and Unloading of VOC | No changing attributes. |
| PROSCRAP | MISCELLANEOUS UNITS | N/A | 63YYYYY-2 | 40 CFR Part 63, Subpart YYYYY | No changing attributes. |
| UOILLOAD | LOADING/ UNLOADING OPERATIONS | N/A | R5211-3 | 30 TAC Chapter 115, Loading and Unloading of VOC | No changing attributes. |

## Unit Summary

| Unit/Group/ Process ID No. | Unit Type | Group/Inclusive Units | SOP Index No. | Regulation | Requirement Driver |
|---|---|---|---|---|---|
| VDBS | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | N/A | R1111-3 | 30 TAC Chapter 111, Visible Emissions | No changing attributes. |
| VDBS | BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS | N/A | 60Dc-1 | 40 CFR Part 60, Subpart Dc | No changing attributes. |

# Applicable Requirements Summary

| Unit Group Process ID No. | Unit Group Process Type | SOP Index No. | Pollutant | State Rule or Federal Regulation Name | Emission Limitation, Standard or Equipment Specification Citation | Textual Description (See Special Term and Condition 1.B.) | Monitoring And Testing Requirements | Recordkeeping Requirements (30 TAC § 122.144) | Reporting Requirements (30 TAC § 122.145) |
|---|---|---|---|---|---|---|---|---|---|
| DHS | EU | 60AAa-2 | PM (OPACITY) | 40 CFR Part 60, Subpart AAa | § 60.272a(b) | On or after the date of the performance test (by §60.8)no owner or operator shall allow discharge into the atmosphere from dust handling system any gases that exhibit 10 percent opacity or greater. | § 60.273a(b)<br>§ 60.275a(d)<br>§ 60.275a(e)<br>§ 60.275a(e)(3) | None | None |
| DIEULD | EU | R5211-1 | VOC | 30 TAC Chapter 115, Loading and Unloading of VOC | § 115.217(b)(2)<br>§ 115.212(b)(2)<br>§ 115.214(b)(1)(B)<br>§ 115.214(b)(1)(D)<br>§ 115.214(b)(1)(D)(i) | Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division except as specified. | § 115.214(b)(1)(A)<br>§ 115.214(b)(1)(A)(i)<br>§ 115.215<br>§ 115.215(4) | § 115.216<br>§ 115.216(2)<br>§ 115.216(3)(B) | None |
| EAF | EU | 60AAa-1 | PM | 40 CFR Part 60, Subpart AAa | § 60.272a(a)(1) | Gases which exit from a control device and contain particulate matter in excess of 12 mg/dscm (0.0052 gr/dscf) shall not be discharged into the atmosphere. | § 60.274a(b)<br>[G]§ 60.274a(h)<br>§ 60.275a(a)<br>§ 60.275a(d)<br>§ 60.275a(e)<br>§ 60.275a(e)(1)<br>§ 60.275a(e)(4)<br>§ 60.275a(f)<br>§ 60.275a(g)<br>§ 60.275a(j) | § 60.274a(a)<br>§ 60.274a(a)(1)<br>§ 60.274a(b)<br>§ 60.276a(a) | [G]§ 60.276a(f) |

# Applicable Requirements Summary

| Unit Group Process ID No. | Unit Group Process Type | SOP Index No. | Pollutant | State Rule or Federal Regulation Name | Emission Limitation, Standard or Equipment Specification Citation | Textual Description (See Special Term and Condition 1.B.) | Monitoring And Testing Requirements | Recordkeeping Requirements (30 TAC § 122.144) | Reporting Requirements (30 TAC § 122.145) |
|---|---|---|---|---|---|---|---|---|---|
| EAF | EU | 60AAa-1 | PM (OPACITY) | 40 CFR Part 60, Subpart AAa | § 60.272a(a)(2) | Gases which exit from a control device and exhibit 3 percent opacity or greater shall not be discharged into the atmosphere. | § 60.273a(c)<br>§ 60.273a(e)<br>§ 60.273a(e)(1)<br>§ 60.273a(e)(2)<br>§ 60.273a(e)(3)<br>[G]§ 60.273a(e)(4)<br>§ 60.273a(e)(5)<br>[G]§ 60.273a(e)(6)<br>§ 60.273a(e)(7)<br>§ 60.273a(e)(8)<br>[G]§ 60.273a(f)<br>§ 60.273a(g)<br>[G]§ 60.274a(h)<br>§ 60.275a(d)<br>§ 60.275a(e)<br>§ 60.275a(e)(3)<br>§ 60.275a(e)(4)<br>§ 60.275a(j) | § 60.273a(c)<br>§ 60.273a(e)(2)<br>§ 60.276a(a)<br>§ 60.276a(h)<br>§ 60.276a(h)(1)<br>§ 60.276a(h)(2)<br>§ 60.276a(h)(3) | [G]§ 60.273a(e)(4)<br>[G]§ 60.273a(e)(6)<br>§ 60.276a(b)<br>[G]§ 60.276a(f) |
| EAF | EU | 63YYYYY-1 | PM | 40 CFR Part 63, Subpart YYYYY | § 63.10686(b)(1)<br>§ 63.10680(b)<br>§ 63.10680(b)(2)<br>§ 63.10680(d)<br>§ 63.10686(a)<br>§ 63.10686(b) | Gases which exit from a control device and contain in excess of 0.0052 grains of PM per dry standard cubic foot (gr/dscf) shall not discharge into the atmosphere from an EAF or AOD vessel. | § 60.275<br>§ 63.10686(d)<br>[G]§ 63.10686(d)(1)<br>§ 63.10686(d)(3)<br>§ 63.10686(e)<br>** See CAM Summary | § 60.274a(h)<br>§ 63.10686(d)(3)<br>§ 63.10686(e) | § 63.10686(d)(4)<br>§ 63.10686(e)<br>§ 63.10690(a)<br>[G]§ 63.10690(b) |
| EBS | EP | R1151-2 | PM | 30 TAC Chapter 111, Nonagricultural Processes | § 111.151(a)<br>§ 111.151(b)<br>§ 111.151(c) | No person may cause, suffer, allow, or permit emissions of particulate matter from any source to exceed the allowable rates specified in Table 1 as follows, except as provided by §111.153 of this title (relating to Emissions Limits for Steam Generators). | ** See CAM Summary | None | None |

# Applicable Requirements Summary

| Unit Group Process ID No. | Unit Group Process Type | SOP Index No. | Pollutant | State Rule or Federal Regulation Name | Emission Limitation, Standard or Equipment Specification Citation | Textual Description (See Special Term and Condition 1.B.) | Monitoring And Testing Requirements | Recordkeeping Requirements (30 TAC § 122.144) | Reporting Requirements (30 TAC § 122.145) |
|---|---|---|---|---|---|---|---|---|---|
| EBS | EP | R1111-2 | OPACITY | 30 TAC Chapter 111, Visible Emissions | § 111.111(a)(1)(C)<br>§ 111.111(a)(1)(E) | Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed. | [G]§ 111.111(a)(1)(F)<br>** See CAM Summary | None | None |
| GASULD | EU | R5211-2 | VOC | 30 TAC Chapter 115, Loading and Unloading of VOC | § 115.212(b)(3)<br>§ 115.212(b)(2)<br>§ 115.212(b)(3)(A)<br>§ 115.212(b)(3)(A)(i)<br>§ 115.212(b)(3)(B)<br>[G]§ 115.212(b)(3)(C)<br>§ 115.212(b)(3)(D)<br>§ 115.214(b)(1)(B)<br>§ 115.214(b)(1)(C) | All land-based VOC transfer to or from transport vessels shall be conducted in the manner specified for leak-free operations. | § 115.212(b)(3)(B)<br>[G]§ 115.212(b)(3)(C)<br>§ 115.214(b)(1)(A)<br>§ 115.214(b)(1)(A)(i)<br>§ 115.214(b)(1)(A)(ii)<br>§ 115.214(b)(1)(A)(iii) | § 115.216<br>§ 115.216(3)(A)<br>§ 115.216(3)(A)(i)<br>§ 115.216(3)(A)(iii) | None |
| LSTBS | EP | R1151-2 | PM | 30 TAC Chapter 111, Nonagricultural Processes | § 111.151(a)<br>§ 111.151(b)<br>§ 111.151(c) | No person may cause, suffer, allow, or permit emissions of particulate matter from any source to exceed the allowable rates specified in Table 1 as follows, except as provided by §111.153 of this title (relating to Emissions Limits for Steam Generators). | ** See CAM Summary | None | None |

# Applicable Requirements Summary

| Unit Group Process ID No. | Unit Group Process Type | SOP Index No. | Pollutant | State Rule or Federal Regulation Name | Emission Limitation, Standard or Equipment Specification Citation | Textual Description (See Special Term and Condition 1.B.) | Monitoring And Testing Requirements | Recordkeeping Requirements (30 TAC § 122.144) | Reporting Requirements (30 TAC § 122.145) |
|---|---|---|---|---|---|---|---|---|---|
| LSTBS | EP | R1111-2 | OPACITY | 30 TAC Chapter 111, Visible Emissions | § 111.111(a)(1)(C)<br>§ 111.111(a)(1)(E) | Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed. | [G]§ 111.111(a)(1)(F)<br>** See CAM Summary | None | None |
| LWS | EP | R1151-1 | PM | 30 TAC Chapter 111, Nonagricultural Processes | § 111.151(a)<br>§ 111.151(b)<br>§ 111.151(c) | No person may cause, suffer, allow, or permit emissions of particulate matter from any source to exceed the allowable rates specified in Table 1 as follows, except as provided by §111.153 of this title (relating to Emissions Limits for Steam Generators). | ** See CAM Summary | None | None |
| LWS | EP | R1111-1 | OPACITY | 30 TAC Chapter 111, Visible Emissions | § 111.111(a)(1)(B)<br>§ 111.111(a)(1)(E) | Visible emissions from any stationary vent shall not exceed an opacity of 20% averaged over a six minute period for any source on which construction was begun after January 31, 1972. | [G]§ 111.111(a)(1)(F)<br>** See Periodic Monitoring Summary | None | None |
| MSB | EU | 60AAa-3 | PM (OPACITY) | 40 CFR Part 60, Subpart AAa | § 60.272a(a)(3) | Gases which exit from a shop and exhibit 6 percent opacity or greater due to the operations of any affected EAF(s) or AOD vessel(s) shall not be discharged into the atmosphere. | § 60.273a(d)<br>§ 60.274a(c)<br>[G]§ 60.274a(h)<br>§ 60.275a(d)<br>§ 60.275a(e)<br>§ 60.275a(e)(3)<br>§ 60.275a(e)(4)<br>§ 60.275a(f)<br>§ 60.275a(j) | § 60.273a(d)<br>§ 60.274a(a)<br>§ 60.274a(a)(2)<br>§ 60.274a(c)<br>§ 60.276a(a)<br>§ 60.276a(g) | § 60.276a(c)<br>[G]§ 60.276a(f)<br>§ 60.276a(g) |

# Applicable Requirements Summary

| Unit Group Process ID No. | Unit Group Process Type | SOP Index No. | Pollutant | State Rule or Federal Regulation Name | Emission Limitation, Standard or Equipment Specification Citation | Textual Description (See Special Term and Condition 1.B.) | Monitoring And Testing Requirements | Recordkeeping Requirements (30 TAC § 122.144) | Reporting Requirements (30 TAC § 122.145) |
|---|---|---|---|---|---|---|---|---|---|
| MSB | CD | 63YYYYY-3 | PM (OPACITY) | 40 CFR Part 63, Subpart YYYYY | § 63.10686(b)(2)<br>§ 63.10680(b)<br>§ 63.10680(b)(2)<br>§ 63.10680(d)<br>§ 63.10686(b) | Gases which exit from a melt shop and, due solely to the operations of any affected EAF(s) or AOD vessel(s), exhibit 6% opacity or greater shall not discharge into the atmosphere from an EAF or AOD vessel. | § 63.10686(d)<br>§ 63.10686(d)(2) | None | § 63.10690(a)<br>[G]§ 63.10690(b) |
| OILULD | EU | R5211-1 | VOC | 30 TAC Chapter 115, Loading and Unloading of VOC | § 115.217(b)(2)<br>§ 115.214(b)(1)(B)<br>§ 115.214(b)(1)(D)<br>§ 115.214(b)(1)(D)(i) | Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division except as specified. | § 115.214(b)(1)(A)<br>§ 115.214(b)(1)(A)(i)<br>§ 115.215<br>§ 115.215(4) | § 115.216<br>§ 115.216(2)<br>§ 115.216(3)(B) | None |
| PROSCRAP | PRO | 63YYYYY-2 | HAPS | 40 CFR Part 63, Subpart YYYYY | § 63.10685(a)<br>§ 63.10685(a)(2)<br>§ 63.10685(b)<br>§ 63.10685(b)(2)<br>§ 63.10685(b)(2)(i)<br>§ 63.10685(b)(2)(ii)<br>§ 63.10685(b)(2)(iii)<br>§ 63.10685(b)(4) | For metallic scrap utilized in the EAF at your facility, you must comply with the requirements of 63.10685(a)(2). | § 63.10685(b)(2)(iv)<br>§ 63.10685(b)(2)(iv)(B)<br>§ 63.10685(b)(2)(iv)(C) | § 63.10685(b)(2)(iv)<br>§ 63.10685(b)(2)(iv)(A)<br>§ 63.10685(b)(2)(iv)(B)<br>§ 63.10685(b)(4)<br>§ 63.10685(c)<br>§ 63.10685(c)(2) | § 63.10685(b)(2)(iii)<br>§ 63.10685(b)(4)<br>§ 63.10685(c)(3)<br>§ 63.10690(a)<br>[G]§ 63.10690(b) |
| UOILLOAD | EU | R5211-3 | VOC | 30 TAC Chapter 115, Loading and Unloading of VOC | § 115.217(b)(2)<br>§ 115.214(b)(1)(B)<br>§ 115.214(b)(1)(D)<br>§ 115.214(b)(1)(D)(i) | Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division except as specified. | § 115.214(b)(1)(A)<br>§ 115.214(b)(1)(A)(i)<br>§ 115.215<br>§ 115.215(4) | § 115.216<br>§ 115.216(2)<br>§ 115.216(3)(B) | None |

# Applicable Requirements Summary

| Unit Group Process ID No. | Unit Group Process Type | SOP Index No. | Pollutant | State Rule or Federal Regulation Name | Emission Limitation, Standard or Equipment Specification Citation | Textual Description (See Special Term and Condition 1.B.) | Monitoring And Testing Requirements | Recordkeeping Requirements (30 TAC § 122.144) | Reporting Requirements (30 TAC § 122.145) |
|---|---|---|---|---|---|---|---|---|---|
| VDBS | EP | R1111-3 | OPACITY | 30 TAC Chapter 111, Visible Emissions | § 111.111(a)(1)(C)<br>§ 111.111(a)(1)(E) | Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed. | [G]§ 111.111(a)(1)(F)<br>** See Periodic Monitoring Summary | None | None |
| VDBS | EU | 60Dc-1 | $SO_2$ | 40 CFR Part 60, Subpart Dc | § 60.40c(a) | This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW). | None | § 60.48c(g)(1)<br>§ 60.48c(g)(2)<br>§ 60.48c(g)(3)<br>§ 60.48c(i) | [G]§ 60.48c(a)<br>§ 60.48c(j) |
| VDBS | EU | 60Dc-1 | PM | 40 CFR Part 60, Subpart Dc | § 60.40c(a) | This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW). | None | § 60.48c(g)(1)<br>§ 60.48c(g)(2)<br>§ 60.48c(g)(3)<br>§ 60.48c(i) | [G]§ 60.48c(a)<br>§ 60.48c(j) |
| VDBS | EU | 60Dc-1 | PM (OPACITY) | 40 CFR Part 60, Subpart Dc | § 60.40c(a) | This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW). | None | § 60.48c(g)(1)<br>§ 60.48c(g)(2)<br>§ 60.48c(g)(3)<br>§ 60.48c(i) | [G]§ 60.48c(a)<br>§ 60.48c(j) |

## Additional Monitoring Requirements

## CAM Summary

| **Unit/Group/Process Information** | |
|---|---|
| ID No.: EAF | |
| Control Device ID No.: EBS | Control Device Type: Fabric Filter |
| **Applicable Regulatory Requirement** | |
| Name: 40 CFR Part 63, Subpart YYYYY | SOP Index No.: 63YYYYY-1 |
| Pollutant: PM | Main Standard: § 63.10686(b)(1) |
| **Monitoring Information** | |
| Indicator: Bag Leak Detection Signal | |
| Minimum Frequency: four times per hour | |
| Averaging Period: Establish per EPA Guidance (EPA-454/R-98-015) | |
| Deviation Limit: A maximum signal shall be established using EPA's, Office of Air Quality Planning and Standards, Fabric Filter Bag Leak Detection Guidance (EPA-454/R-98-015). | |
| CAM Text: Each monitoring device shall be installed, operated, calibrated, and maintained in a manner consistent with EPA, Office of Air Quality Planning and Standards, Fabric Filter Bag Leak Detection Guidance (EPA-454/R-98-015). | |

## CAM Summary

| **Unit/Group/Process Information** | |
|---|---|
| ID No.: EBS | |
| Control Device ID No.: EBS | Control Device Type: Fabric Filter |
| **Applicable Regulatory Requirement** | |
| Name: 30 TAC Chapter 111, Visible Emissions | SOP Index No.: R1111-2 |
| Pollutant: OPACITY | Main Standard: § 111.111(a)(1)(C) |
| **Monitoring Information** | |
| Indicator: Opacity | |
| Minimum Frequency: once per day | |
| Averaging Period: six-minute | |
| Deviation Limit: Opacity shall be monitored, by a certified observer, for a least one, six-minute period each day, in accordance with Method 9. Deviations if opacity is above 15%. | |
| CAM Text: Opacity shall be monitored, by a certified observer, for at least one, six-minute period each day, in accordance with Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Appendix A, Test Method 9 and 40 CFR § 64.7(c). If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. | |

## CAM Summary

| **Unit/Group/Process Information** | |
|---|---|
| ID No.: EBS | |
| Control Device ID No.: EBS | Control Device Type: Fabric Filter |
| **Applicable Regulatory Requirement** | |
| Name: 30 TAC Chapter 111, Nonagricultural Processes | SOP Index No.: R1151-2 |
| Pollutant: PM | Main Standard: § 111.151(a) |
| **Monitoring Information** | |
| Indicator: Bag Leak Detection Signal | |
| Minimum Frequency: four times per hour | |
| Averaging Period: Establish per EPA Guidance (EPA-454/R-98-015) | |
| Deviation Limit: A maximum signal shall be established using EPA's, Office of Air Quality Planning and Standards, Fabric Filter Bag Leak Detection Guidance (EPA-454/R-98-015). | |
| CAM Text: Each monitoring device shall be installed, operated, calibrated, and maintained in a manner consistent with EPA, Office of Air Quality Planning and Standards, Fabric Filter Bag Leak Detection Guidance (EPA-454/R-98-015). | |

## CAM Summary

| **Unit/Group/Process Information** | |
|---|---|
| ID No.: LSTBS | |
| Control Device ID No.: LSTBS | Control Device Type: Fabric Filter |
| **Applicable Regulatory Requirement** | |
| Name: 30 TAC Chapter 111, Visible Emissions | SOP Index No.: R1111-2 |
| Pollutant: OPACITY | Main Standard: § 111.111(a)(1)(C) |
| **Monitoring Information** | |
| Indicator: Visible Emissions | |
| Minimum Frequency: once per day | |
| Averaging Period: n/a | |
| Deviation Limit: Daily visible emissions monitoring shall be performed and recorded. If visible emissions are observed, the permit holder shall report a deviation. Alternative to use Test Method 9, no later than 24 hours after observing visible emissions. | |
| CAM Text: Visible emissions observations shall be made and recorded in accordance with the requirements specified in 40 CFR § 64.7(c). Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. | |

## CAM Summary

| **Unit/Group/Process Information** | |
|---|---|
| ID No.: LSTBS | |
| Control Device ID No.: LSTBS | Control Device Type: Fabric Filter |
| **Applicable Regulatory Requirement** | |
| Name: 30 TAC Chapter 111, Nonagricultural Processes | SOP Index No.: R1151-2 |
| Pollutant: PM | Main Standard: § 111.151(a) |
| **Monitoring Information** | |
| Indicator: Pressure Drop | |
| Minimum Frequency: once per day | |
| Averaging Period: n/a* | |
| Deviation Limit: A minimum and maximum pressure drop shall be established using the most appropriate of the following: the most recent performance test data, the manufacturer's recommendations, engineering calculations, and/or historical data. | |
| CAM Text: Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following:<br>± 0.5 inches water gauge pressure (± 125 pascals); or<br>± 0.5% of span. | |

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

## CAM Summary

| **Unit/Group/Process Information** | |
|---|---|
| ID No.: LSTBS | |
| Control Device ID No.: LSTBS | Control Device Type: Fabric Filter |
| **Applicable Regulatory Requirement** | |
| Name: 30 TAC Chapter 111, Nonagricultural Processes | SOP Index No.: R1151-2 |
| Pollutant: PM | Main Standard: § 111.151(a) |
| **Monitoring Information** | |
| Indicator: Visible Emissions | |
| Minimum Frequency: once per day | |
| Averaging Period: n/a | |
| Deviation Limit: If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity, consistent with Test Method 9, no later than 24 hours after observing visible emissions. | |
| CAM Text: Visible emissions observations shall be made and recorded in accordance with the requirements specified in 40 CFR § 64.7(c). Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. | |

## CAM Summary

| **Unit/Group/Process Information** | |
|---|---|
| ID No.: LWS | |
| Control Device ID No.: LWS | Control Device Type: Fabric Filter |
| **Applicable Regulatory Requirement** | |
| Name: 30 TAC Chapter 111, Nonagricultural Processes | SOP Index No.: R1151-1 |
| Pollutant: PM | Main Standard: § 111.151(a) |
| **Monitoring Information** | |
| Indicator: Pressure Drop | |
| Minimum Frequency: once per day | |
| Averaging Period: n/a* | |
| Deviation Limit: A minimum and maximum pressure drop shall be established using the most appropriate of the following: the most recent performance test data, the manufacturer's recommendations, engineering calculations, and/or historical data. | |
| CAM Text: Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following:<br>± 0.5 inches water gauge pressure (± 125 pascals); or<br>± 0.5% of span. | |

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

## Periodic Monitoring Summary

| **Unit/Group/Process Information** | |
|---|---|
| ID No.: LWS | |
| Control Device ID No.: LWS | Control Device Type: Fabric Filter |
| **Applicable Regulatory Requirement** | |
| Name: 30 TAC Chapter 111, Visible Emissions | SOP Index No.: R1111-1 |
| Pollutant: OPACITY | Main Standard: § 111.111(a)(1)(B) |
| **Monitoring Information** | |
| Indicator: Visible Emissions | |
| Minimum Frequency: once per week | |
| Averaging Period: n/a | |
| Deviation Limit: If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the applicant may determine opacity, consistent with Test Method 9, no later than 24 hours after observing visible emissions. | |
| Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor.<br><br>If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If the result of the Test Method 9 is opacity above the opacity limit in the applicable requirement, the permit holder shall report a deviation. | |

## Periodic Monitoring Summary

| **Unit/Group/Process Information** | |
|---|---|
| ID No.: VDBS | |
| Control Device ID No.: VDBS | Control Device Type: Fabric Filter |
| **Applicable Regulatory Requirement** | |
| Name: 30 TAC Chapter 111, Visible Emissions | SOP Index No.: R1111-3 |
| Pollutant: OPACITY | Main Standard: § 111.111(a)(1)(C) |
| **Monitoring Information** | |
| Indicator: Visible Emissions | |
| Minimum Frequency: once per week | |
| Averaging Period: n/a | |
| Deviation Limit: If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the applicant may determine opacity, consistent with Test Method 9, no later than 24 hours after observing visible emissions. | |
| Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor.<br><br>If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If the result of the Test Method 9 is opacity above the opacity limit in the applicable requirement, the permit holder shall report a deviation. | |

## Permit Shield

## Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

| Unit/Group/Process | | Regulation | Basis of Determination |
|---|---|---|---|
| ID No. | Group/Inclusive Units | | |
| CS4 | N/A | 40 CFR Part 63, Subpart HHHHHH | The facility does not perform paint stripping using MeCl, perform spray application of coatings to motor vehicles or mobile equipment, and the coating does not contain a target HAP. |
| CS5 | N/A | 40 CFR Part 63, Subpart HHHHHH | The facility does not perform paint stripping using MeCl, perform spray application of coatings to motor vehicles or mobile equipment, and the coating does not contain a target HAP. |
| CS6 | N/A | 40 CFR Part 63, Subpart HHHHHH | The facility does not perform paint stripping using MeCl, perform spray application of coatings to motor vehicles or mobile equipment, and the coating does not contain a target HAP. |
| DST1 | N/A | 30 TAC Chapter 115, Storage of VOCs | The diesel storage tank has a capacity less than 1,000 gallons. |
| GRP-COLTOW | N6CCT, N7CCT, PPCCT, RSCCT | 40 CFR Part 63, Subpart Q | Chromium-based water treatment chemicals are not used in the cooling towers. |
| GST1 | N/A | 30 TAC Chapter 115, Storage of VOCs | The gasoline storage tank has a capacity less than 1,000 gallons. |

## Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

| Unit/Group/Process | | Regulation | Basis of Determination |
|---|---|---|---|
| ID No. | Group/Inclusive Units | | |
| MPFS | N/A | 30 TAC Chapter 117, Subchapter B | The facility is not located in an ozone nonattainment area. |
| PHOS1 | N/A | 40 CFR Part 63, Subpart WWWWWW | The facility utilizes manganese compounds however the definition of a plating and polishing metal HAP is not met because the compounds do not contain greater than 1wt% manganese. |
| PHOS2 | N/A | 40 CFR Part 63, Subpart WWWWWW | The facility utilizes manganese compounds however the definition of a plating and polishing metal HAP is not met because the compounds do not contain greater than 1wt% manganese. |
| QFS | N/A | 30 TAC Chapter 117, Subchapter B | The facility is not located in an ozone nonattainment area. |
| QFS2 | N/A | 30 TAC Chapter 117, Subchapter B | The facility is not located in an ozone nonattainment area. |
| RHF | N/A | 30 TAC Chapter 117, Subchapter B | The facility is not located in an ozone nonattainment area. |
| TF | N/A | 30 TAC Chapter 117, Subchapter B | The facility is not located in an ozone nonattainment area. |
| TFS2 | N/A | 30 TAC Chapter 117, Subchapter B | The facility is not located in an ozone nonattainment area. |

## Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

| Unit/Group/Process | | Regulation | Basis of Determination |
|---|---|---|---|
| ID No. | Group/Inclusive Units | | |
| UOST1 | N/A | 30 TAC Chapter 115, Storage of VOCs | The contents of the used oil tank has a true vapor pressure less than 1.5 psia. |
| UVCS1 | N/A | 40 CFR Part 63, Subpart HHHHHH | The facility does not perform paint stripping using MeCl, perform spray application of coatings to motor vehicles or mobile equipment, and the coating does not contain a target HAP. |
| UVCS2 | N/A | 40 CFR Part 63, Subpart HHHHHH | The facility does not perform paint stripping using MeCl, perform spray application of coatings to motor vehicles or mobile equipment, and the coating does not contain a target HAP. |
| UVCS3 | N/A | 40 CFR Part 63, Subpart HHHHHH | The facility does not perform paint stripping using MeCl, perform spray application of coatings to motor vehicles or mobile equipment, and the coating does not contain a target HAP. |
| UVCS4 | N/A | 40 CFR Part 63, Subpart HHHHHH | The facility does not perform paint stripping using MeCl, perform spray application of coatings to motor vehicles or mobile equipment, and the coating does not contain a target HAP. |
| VDBS | N/A | 30 TAC Chapter 117, Subchapter B | The facility is not located in an ozone nonattainment area. |

## Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

| Unit/Group/Process | | Regulation | Basis of Determination |
|---|---|---|---|
| ID No. | Group/Inclusive Units | | |
| VDBS | N/A | 40 CFR Part 63, Subpart JJJJJJ | Boiler only fires natural gas. |

## New Source Review Authorization References

## New Source Review Authorization References

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

| **Prevention of Significant Deterioration (PSD) Permits** | |
|---|---|
| PSD Permit No.: PSDTX1188 | Issuance Date: 08/22/2013 |
| **Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.** | |
| Authorization No.: 100133 | Issuance Date: 04/23/2013 |
| Authorization No.: 86860 | Issuance Date: 08/22/2013 |
| **Permits By Rule (30 TAC Chapter 106) for the Application Area** | |
| Number: 106.263 | Version No./Date: 11/01/2001 |
| Number: 106.472 | Version No./Date: 09/04/2000 |
| Number: 106.473 | Version No./Date: 09/04/2000 |
| Number: 106.511 | Version No./Date: 09/04/2000 |

## New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

| Unit/Group/Process ID No. | Emission Unit Name/Description | New Source Review Authorization |
|---|---|---|
| CS4 | COATING STACK NO.1/SPRAY BOOTH | 100133 |
| CS5 | COATING STACK NO.2 | 100133 |
| CS6 | COATING STACK NO.3 | 100133 |
| DHS | EAF DUST HANDLING SYSTEM | 86860, PSDTX1188 |
| DIEULD | DIESEL UNLOADING OPERATIONS | 106.472/09/04/2000 |
| DST1 | DIESEL STORAGE TANK | 106.472/09/04/2000 |
| EAF | ELECTRIC ARC FURNACE | 86860, PSDTX1188 |
| EBS | EAF BAGHOUSE STACK | 86860, PSDTX1188 |
| GASULD | GASOLINE UNLOADING OPERATIONS | 106.473/09/04/2000 |
| GST1 | GASOLINE STORAGE TANK | 106.473/09/04/2000 |
| LSTBS | LF STOCK TANK BAGHOUSE STACK | 86860, PSDTX1188 |
| LWS | LIME WAREHOUSE BAGHOUSE/ALLOY AGGREGATE BAGHOUSE | 86860, PSDTX1188 |
| MPFS | MANDREL PREHEAT FURNACE STACK | 86860, PSDTX1188 |
| MSB | MELT SHOP BUILDING | 86860, PSDTX1188 |
| N6CCT | CONTACT COOLING TOWER NO.6 | 86860, PSDTX1188 |
| N7CCT | CONTACT COOLING TOWER NO.7 | 86860, PSDTX1188 |
| OILULD | OIL UNLOADING OPERATIONS | 106.472/09/04/2000 |

## New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

| Unit/Group/Process ID No. | Emission Unit Name/Description | New Source Review Authorization |
|---|---|---|
| PHOS1 | PHOSPHATIZING STACK NO.1 | 100133 |
| PHOS2 | PHOSPHATIZING STACK NO.2 | 100133 |
| PPCCT | PIPE PROCESSING CONTACT COOLING TOWER | 86860, PSDTX1188 |
| PROSCRAP | SCRAP SELECTION PROCESS | 86860, PSDTX1188 |
| QFS2 | QUENCH FURNACE STACK | 100133 |
| QFS | QUENCH FURNACE STACK | 86860, PSDTX1188 |
| RHF | ROTARY HEARTH FURNACE | 86860, PSDTX1188 |
| RSCCT | ROLLING STEEL CONTACT COOLING TOWER | 86860, PSDTX1188 |
| TFS2 | TEMPERING FURNACE STACK | 100133 |
| TF | TEMPERING FURNACE | 86860, PSDTX1188 |
| UOILLOAD | USED OIL LOADING OPERATIONS | 106.472/09/04/2000 |
| UOST1 | USED OIL STORAGE TANK | 106.472/09/04/2000 |
| UVCS1 | UV COATING STACK 1 | 86860, PSDTX1188 |
| UVCS2 | UV COATING STACK 2 | 86860, PSDTX1188 |
| UVCS3 | UV COATING STACK 3 | 86860, PSDTX1188 |
| UVCS4 | UV COATING STACK 4 | 86860, PSDTX1188 |
| VDBS | VD BOILER STACK | 86860, PSDTX1188 |

## Appendix A

## Acronym List

The following abbreviations or acronyms may be used in this permit:

ACFM ..... actual cubic feet per minute
AMOC ..... alternate means of control
ARP ..... Acid Rain Program
ASTM ..... American Society of Testing and Materials
B/PA ..... Beaumont/Port Arthur (nonattainment area)
CAM ..... Compliance Assurance Monitoring
CD ..... control device
COMS ..... continuous opacity monitoring system
CVS ..... closed-vent system
D/FW ..... Dallas/Fort Worth (nonattainment area)
DR ..... Designated Representative
ElP ..... El Paso (nonattainment area)
EP ..... emission point
EPA ..... U.S. Environmental Protection Agency
EU ..... emission unit
FCAA Amendments ..... Federal Clean Air Act Amendments
FOP ..... federal operating permit
GF ..... grandfathered
gr/100 scf ..... grains per 100 standard cubic feet
HAP ..... hazardous air pollutant
H/G/B ..... Houston/Galveston/Brazoria (nonattainment area)
$H_2S$ ..... hydrogen sulfide
ID No. ..... identification number
lb/hr ..... pound(s) per hour
MMBtu/hr ..... Million British thermal units per hour
MRRT ..... monitoring, recordkeeping, reporting, and testing
NA ..... nonattainment
N/A ..... not applicable
NADB ..... National Allowance Data Base
$NO_x$ ..... nitrogen oxides
NSPS ..... New Source Performance Standard (40 CFR Part 60)
NSR ..... New Source Review
ORIS ..... Office of Regulatory Information Systems
Pb ..... lead
PBR ..... Permit By Rule
PM ..... particulate matter
ppmv ..... parts per million by volume
PSD ..... prevention of significant deterioration
RO ..... Responsible Official
$SO_2$ ..... sulfur dioxide
TCEQ ..... Texas Commission on Environmental Quality
TSP ..... total suspended particulate
TVP ..... true vapor pressure
U.S.C. ..... United States Code
VOC ..... volatile organic compound

## Appendix B

| Permit Number: 86860 / PSDTX1188 | | | Issuance Date: 8/22/2013 | | | | |
|---|---|---|---|---|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates * | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lb/hr | TPY** | Spec. Cond. | Spec. Cond. | Spec. Cond. |
| LWS | Lime Warehouse Baghouse and Alloy Aggregate Baghouse Stack<br><br>FINs Description: Lime Silo and Flux Unloading and Storage Bin | PM | 5.98 | 26.17 | 6; 24; 28; 29; 32 | 6; 32; 42 | 32; 34 |
| | | $PM_{10}$ | 5.98 | 26.17 | | | |
| LSTBS | LF and Stock Tank Baghouse Stack<br><br>FINs Description: EAF Elevated Bunker, LF Elevated Lime Bunker, and Ladle Furnace (6) | PM | 4.54 | 19.89 | 6; 9; 24; 28; 29; 31; 32 | 6; 9; 31; 32; 42 | 32; 34 |
| | | $PM_{10}$ | 4.54 | 19.89 | | | |
| | | Cd | <0.001 | <0.004 | | | |
| | | Cr | <0.006 | 0.02 | | | |
| | | Pb | 0.04 | 0.17 | | | |
| | | Mn | 0.03 | 0.15 | | | |
| | | Hg | <0.0001 | <0.0004 | | | |
| | | Si | <0.005 | 0.02 | | | |
| | | Zn | 0.28 | 1.23 | | | |
| EBS | EAF Baghouse Stack (6) | $NO_x$ | 44.64 | 137.24 | 2; 3; 5; 9; 28; 29; 30; 31; 32; 35; 36 | 2; 3; 5; 9; 30; 31; 32; 35; 36; 42 | 2; 3; 30; 32; 34; 35; 41 |
| | | CO | 595.24 | 1829.82 | | | |
| | | VOC | 44.64 | 137.24 | | | |
| | | $SO_2$ | 89.29 | 274.47 | | | |
| | | PM (total) | 20.18 | 88.38 | | | |
| | | $PM_{10}$ (total) | 20.18 | 88.38 | | | |
| | | PM (front half) | 15.13 | 66.28 | | | |
| | | $PM_{10}$ (front half) | 15.13 | 66.28 | | | |
| | | Cd | <0.004 | 0.02 | | | |
| | | Cr | 0.02 | 0.11 | | | |
| | | Pb | 0.17 | 0.74 | | | |
| | | Mn | 0.15 | 0.67 | | | |
| | | Hg | <0.0004 | <0.002 | | | |
| | | Si | 0.02 | 0.08 | | | |
| | | Zn | 1.24 | 5.45 | | | |
| RHFS | Rotary Hearth Furnace Stack | $NO_x$ | 44.63 | 67.91 | 4; 5; 9; 28; 29 | 4; 5; 9; 42 | |
| | | CO | 36.75 | 55.93 | | | |
| | | VOC | 2.41 | 3.66 | | | |
| | | $SO_2$ | 0.26 | 0.40 | | | |
| | | PM | 3.33 | 5.06 | | | |

| Permit Number: 86860 / PSDTX1188 | | | Issuance Date: 8/22/2013 | | | | |
|---|---|---|---|---|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates * | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lb/hr | TPY** | Spec. Cond. | Spec. Cond. | Spec. Cond. |
| | | $PM_{10}$ | 3.33 | 5.06 | | | |
| MPFS | Mandrel Preheat Furnace Stack | $NO_x$ | 1.33 | 5.83 | 4; 6; 9; 24; 28; 29 | 4; 6; 9; 42 | |
| | | CO | 1.12 | 4.9 | | | |
| | | VOC | 0.07 | 0.32 | | | |
| | | $SO_2$ | <0.01 | 0.03 | | | |
| | | PM | 0.10 | 0.44 | | | |
| | | $PM_{10}$ | 0.10 | 0.44 | | | |
| QFS | Quench Furnace Stack | $NO_x$ | 6.85 | 11.89 | 4; 6; 9; 24; 28; 29 | 4; 6; 9; 42 | |
| | | CO | 5.75 | 9.99 | | | |
| | | VOC | 0.38 | 0.65 | | | |
| | | $SO_2$ | 0.04 | 0.07 | | | |
| | | PM | 0.52 | 0.90 | | | |
| | | $PM_{10}$ | 0.52 | 0.90 | | | |
| TFS | Tempering Furnace Stack | $NO_x$ | 5.71 | 9.51 | 4; 6; 9; 24; 28; 29 | 4; 6; 9; 42 | |
| | | CO | 4.79 | 7.99 | | | |
| | | VOC | 0.31 | 0.52 | | | |
| | | $SO_2$ | 0.03 | 0.06 | | | |
| | | PM | 0.43 | 0.72 | | | |
| | | $PM_{10}$ | 0.43 | 0.72 | | | |
| VDBS | VD Boiler Stack | $NO_x$ | 4.01 | 7.58 | 4; 6; 9; 24; 28; 29 | 4; 6; 9; 42 | |
| | | CO | 3.37 | 6.37 | | | |
| | | VOC | 0.22 | 0.42 | | | |
| | | $SO_2$ | 0.02 | 0.05 | | | |
| | | PM | 0.30 | 0.58 | | | |
| | | $PM_{10}$ | 0.30 | 0.58 | | | |
| SMWV | Steel Making Workshop Vent<br><br>Ladle Preheater, Tundish Preheater, and Ladle Relining<br><br>(6) and (7) | $NO_x$ | 11.54 | 29.04 | 4; 7; 8; 9; 24 | 4; 7; 8; 9; 42 | |
| | | CO | 11.31 | 30.02 | | | |
| | | VOC | 1.24 | 4.01 | | | |
| | | $SO_2$ | 0.08 | 0.20 | | | |
| | | PM | 0.14 | 0.41 | | | |
| | | $PM_{10}$ | 0.14 | 0.39 | | | |
| | | Cd | <0.00001 | <0.0001 | | | |
| | | Cr | <0.0022 | <0.0087 | | | |
| | | Cr VI | <0.002 | <0.008 | | | |
| | | Pb | <0.0001 | <0.0002 | | | |
| | | Mn | <0.01 | <0.005 | | | |
| | | Hg | <0.00001 | <0.00001 | | | |

| Permit Number: 86860 / PSDTX1188 | | | Issuance Date: 8/22/2013 | | | | |
|---|---|---|---|---|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates * | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lb/hr | TPY** | Spec. Cond. | Spec. Cond. | Spec. Cond. |
| | | Si | <0.00001 | <0.00001 | | | |
| | | Zn | 0.0001 | <0.0005 | | | |
| AAWV | Alloy Aggregate Warehouse Vent | PM | <0.01 | <0.01 | | | |
| | | $PM_{10}$ | <0.01 | <0.01 | | | |
| PCLWV | Premium Connecting Line Workshop Vent (7) | CO | 1.27 | 5.22 | 9 | 9; 42 | |
| | | VOC | 0.9 | 3.86 | | | |
| | | PM | 0.09 | 0.38 | | | |
| | | $PM_{10}$ | 0.09 | 0.38 | | | |
| HRPPWV | Hot Rolling and Pipe Processing Workshop Vent (6) and (7) | CO | 1.44 | 6.21 | 8; 9; 24 | 8; 9; 42 | |
| | | VOC | 1.76 | 7.2 | | | |
| | | PM | 0.17 | 0.69 | | | |
| | | $PM_{10}$ | 0.17 | 0.69 | | | |
| | | Cr | <0.003 | <0.012 | | | |
| | | Cr VI | 0.002 | 0.008 | | | |
| | | Mn | <0.01 | <0.006 | | | |
| HRLDS | Hot Rolling Line Sinter Plate Filter Stack, Piercing Mill, Borax Spraying, PQF Pipe Mill, Extracting Mill, and Pipe Cutting<br><br>FINs: HRL, BSCS, PM, EM, and SM | PM | 4.25 | 4.25 | 6; 8; 19; 24; 28; 29; 33 | 6; 8; 33; 42 | |
| | | $PM_{10}$ | 4.25 | 4.25 | | | |
| ODPSS1 | Outdoor Drop Points, Scrap Steel by Truck 10 (5) | PM | 0.03 | 0.10 | | | |
| | | $PM_{10}$ | 0.01 | 0.05 | | | |
| ODPSS2 | Outdoor Drop Points Scrap Steel By Train 4 (5) | PM | 0.03 | 0.10 | | | |
| | | $PM_{10}$ | 0.01 | 0.05 | | | |
| ODPSR1 | Outdoor Drop Point Spent Refractory and Other Waste Storage Pile-1 (5) | PM | <0.01 | 0.02 | | | |
| | | $PM_{10}$ | <0.01 | <0.01 | | | |
| ODPS1 | Outdoor Drop Point Slag-1 (5) | PM | <0.01 | 0.01 | | | |
| | | $PM_{10}$ | <0.01 | <0.01 | | | |
| ODPSR2 | Outdoor Drop Point Spent Refractory and Other Waste Storage Pile-2 (5) | PM | 0.05 | 0.03 | | | |
| | | $PM_{10}$ | 0.02 | 0.02 | | | |

| Permit Number: 86860 / PSDTX1188 | | | Issuance Date: 8/22/2013 | | | | |
|---|---|---|---|---|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates * | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lb/hr | TPY** | Spec. Cond. | Spec. Cond. | Spec. Cond. |
| ODPS2 | Outdoor Drop Point Slag-2*2 (5) | PM | <0.01 | <0.01 | | | |
| | | $PM_{10}$ | <0.01 | <0.01 | | | |
| ODPSR3 | Outdoor Drop Point Spent Refractory and Other Waste Storage Pile-3 (5) | PM | <0.01 | 0.02 | | | |
| | | $PM_{10}$ | <0.01 | <0.01 | | | |
| ODPS3 | Outdoor Drop Point Slag-3 (5) | PM | <0.01 | <0.01 | | | |
| | | $PM_{10}$ | <0.01 | <0.01 | | | |
| OSPSS | Outdoor Storage Piles, Scrap Steel (5) | PM | 0.23 | 1.00 | | | |
| | | $PM_{10}$ | 0.11 | 0.5 | | | |
| OSPFST | Outdoor Storage Pile, First Sedimentation Tank (5) | PM | <0.01 | <0.01 | | | |
| | | $PM_{10}$ | <0.01 | <0.01 | | | |
| OSPS1 | Outdoor Storage Pile, Slag-1 (5) | PM | 0.06 | 0.26 | | | |
| | | $PM_{10}$ | 0.03 | 0.13 | | | |
| OSPSR1 | Outdoor Storage Pile Spent Refractory and Other Waste-1 (5) | PM | 0.23 | 1.00 | | | |
| | | $PM_{10}$ | 0.11 | 0.50 | | | |
| OSPS2 | Outdoor Storage Pile, Slag-2 (5) | PM | 0.06 | 0.26 | | | |
| | | $PM_{10}$ | 0.03 | 0.13 | | | |
| OSPSR2 | Outdoor Storage Pile, Spent Refractory and Other Waste-2 (5) | PM | 0.23 | 1.00 | | | |
| | | $PM_{10}$ | 0.11 | 0.50 | | | |
| N6CCT | Contact Cooling Tower No. 6 (5) | PM | 0.03 | 0.14 | | | |
| | | $PM_{10}$ | 0.03 | 0.14 | | | |
| N7CCT | Contact Cooling Tower No. 7 (5) | PM | 0.02 | 0.07 | | | |
| | | $PM_{10}$ | 0.02 | 0.07 | | | |
| RSCCT | Rolling Steel Contact Cooling Tower (5) | PM | 0.03 | 0.14 | | | |
| | | $PM_{10}$ | 0.03 | 0.14 | | | |
| PPCCT | Pipe Processing Contact Cooling Tower (5) | PM | 0.03 | 0.14 | | | |
| | | $PM_{10}$ | 0.03 | 0.14 | | | |
| SMWTF | Steel Making Water Treatment Facility (5) | VOC | 0.10 | 0.10 | | | |
| | | PM | 0.10 | 0.10 | | | |
| | | $PM_{10}$ | 0.10 | 0.10 | | | |
| RSWTF | Rolling Steel Water Treatment Facility (5) | VOC | 0.10 | 0.10 | | | |
| | | PM | 0.10 | 0.10 | | | |
| | | $PM_{10}$ | 0.10 | 0.10 | | | |

| Permit Number: 86860 / PSDTX1188 | | | Issuance Date: 8/22/2013 | | | | |
|---|---|---|---|---|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates * | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lb/hr | TPY** | Spec. Cond. | Spec. Cond. | Spec. Cond. |
| GWTF | Graphite Water Treatment Facility (5) | VOC | 0.10 | 0.10 | | | |
| | | PM | 0.10 | 0.10 | | | |
| | | $PM_{10}$ | 0.10 | 0.10 | | | |
| CMSCS1 | Caster Spray Chamber Stack 1 | $NO_x$ | 0.18 | 0.55 | 29 | | |
| | | CO | 0.58 | 1.75 | | | |
| | | VOC | 0.02 | 0.07 | | | |
| | | PM | 0.07 | 0.22 | | | |
| | | $PM_{10}$ | 0.07 | 0.22 | | | |
| | | Pb | 0.001 | 0.002 | | | |
| CMSCS2 | Caster Spray Chamber Stack 2 | $NO_x$ | 0.18 | 0.55 | 29 | | |
| | | CO | 0.58 | 1.75 | | | |
| | | VOC | 0.02 | 0.07 | | | |
| | | PM | 0.07 | 0.22 | | | |
| | | $PM_{10}$ | 0.07 | 0.22 | | | |
| | | Pb | 0.001 | 0.002 | | | |
| UVCS1 | UV Coating Stack 1 | VOC | <0.01 | 0.01 | 9; 29 | 9; 42 | |
| | | PM | 0.01 | 0.04 | | | |
| | | $PM_{10}$ | 0.01 | 0.04 | | | |
| UVCS2 | UV Coating Stack 2 | VOC | <0.01 | 0.01 | 9; 29 | 9; 42 | |
| | | PM | 0.01 | 0.04 | | | |
| | | $PM_{10}$ | 0.01 | 0.04 | | | |
| UVCS3 | UV Coating Stack 3 | VOC | <0.01 | 0.01 | 9; 29 | 9; 42 | |
| | | PM | 0.01 | 0.04 | | | |
| | | $PM_{10}$ | 0.01 | 0.04 | | | |
| UVCS4 | UV Coating Stack 4 | VOC | <0.01 | 0.01 | 9; 29 | 9; 42 | |
| | | PM | 0.01 | 0.04 | | | |
| | | $PM_{10}$ | 0.01 | 0.04 | | | |
| VDSS | VD Steam Stack | $NO_x$ | 0.73 | 2.19 | 29 | | |
| | | CO | 29.10 | 87.43 | | | |
| | | VOC | 0.09 | 0.26 | | | |
| | | $SO_2$ | 0.02 | 0.04 | | | |
| | | PM | 0.29 | 0.87 | | | |
| | | $PM_{10}$ | 0.29 | 0.87 | | | |
| ALL | ALL | HAPS | <0.45 | <1.92 | | 42 | |

# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
# AIR QUALITY PERMIT

*A Permit Is Hereby Issued To*
**TPCO America Corporation**
*Authorizing the Construction and Operation of*
**Pipe Manufacturing Steel Minimill**
Located at ***Gregory, San Patricio County, Texas***
Latitude 27° 55′04″ Longitude 097° 16′ 08″

Permit: 86860 and PSDTX1188

Revision Date : August 22, 2013

Renewal Date: April 19, 2020

For the Commission

1. **Facilities** covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code 116.116 (30 TAC 116.116)]
2. **Voiding of Permit**. A permit or permit amendment is automatically void if the holder fails to begin construction within 18 months of the date of issuance, discontinues construction for more than 18 months prior to completion, or fails to complete construction within a reasonable time. Upon request, the executive director may grant an 18-month extension. Before the extension is granted the permit may be subject to revision based on best available control technology, lowest achievable emission rate, and netting or offsets as applicable. One additional extension of up to 18 months may be granted if the permit holder demonstrates that emissions from the facility will comply with all rules and regulations of the commission, the intent of the Texas Clean Air Act (TCAA), including protection of the public's health and physical property; and (b)(1)the permit holder is a party to litigation not of the permit holder's initiation regarding the issuance of the permit; or (b)(2) the permit holder has spent, or committed to spend, at least 10 percent of the estimated total cost of the project up to a maximum of $5 million. A permit holder granted an extension under subsection (b)(1) of this section may receive one subsequent extension if the permit holder meets the conditions of subsection (b)(2) of this section. [30 TAC 116.120(a), (b) and (c)]
3. **Construction Progress**. Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office of the commission not later than 15 working days after occurrence of the event. [30 TAC 116.115(b)(2)(A)]
4. **Start-up Notification**. The appropriate air program regional office shall be notified prior to the commencement of operations of the facilities authorized by the permit in such a manner that a representative of the commission may be present. The permit holder shall provide a separate notification for the commencement of operations for each unit of phased construction, which may involve a series of units commencing operations at different times. Prior to operation of the facilities authorized by the permit, the permit holder shall identify the source or sources of allowances to be utilized for compliance with Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program). [30 TAC 116.115(b)(2)(B)(iii)]
5. **Sampling Requirements**. If sampling is required, the permit holder shall contact the commission's Office of Compliance and Enforcement prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant. [30 TAC 116.115(b)(2)(C)]

6. **Equivalency of Methods.** The permit holder must demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the permit. Alternative methods shall be applied for in writing and must be reviewed and approved by the executive director prior to their use in fulfilling any requirements of the permit. [30 TAC 116.115(b)(2)(D)]
7. **Recordkeeping.** The permit holder shall maintain a copy of the permit along with records containing the information and data sufficient to demonstrate compliance with the permit, including production records and operating hours; keep all required records in a file at the plant site. If, however, the facility normally operates unattended, records shall be maintained at the nearest staffed location within Texas specified in the application; make the records available at the request of personnel from the commission or any air pollution control program having jurisdiction; comply with any additional recordkeeping requirements specified in special conditions attached to the permit; and retain information in the file for at least two years following the date that the information or data is obtained. [30 TAC 116.115(b)(2)(E)]
8. **Maximum Allowable Emission Rates**. The total emissions of air contaminants from any of the sources of emissions must not exceed the values stated on the table attached to the permit entitled "Emission Sources--Maximum Allowable Emission Rates." [30 TAC 116.115(b)(2)(F)]
9. **Maintenance of Emission Control**. The permitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. The permit holder shall provide notification for upsets and maintenance in accordance with 30 TAC 101.201, 101.211, and 101.221 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements; and Operational Requirements). [30 TAC 116.115(b)(2)(G)]
10. **Compliance with Rules**. Acceptance of a permit by an applicant constitutes an acknowledgment and agreement that the permit holder will comply with all rules, regulations, and orders of the commission issued in conformity with the TCAA and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition is applicable, the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. [30 TAC 116.115(b)(2)(H)]
11. **This** permit may not be transferred, assigned, or conveyed by the holder except as provided by rule. [30 TAC 116.110(e)]
12. **There** may be additional special conditions attached to a permit upon issuance or modification of the permit. Such conditions in a permit may be more restrictive than the requirements of Title 30 of the Texas Administrative Code. [30 TAC 116.115(c)]
13. **Emissions** from this facility must not cause or contribute to a condition of "air pollution" as defined in Texas Health and Safety Code (THSC) 382.003(3) or violate THSC 382.085. If the executive director determines that such a condition or violation occurs, the holder shall implement additional abatement measures as necessary to control or prevent the condition or violation.
14. **The** permit holder shall comply with all the requirements of this permit. Emissions that exceed the limits of this permit are not authorized and are violations of this permit.

Special Conditions

Permit Numbers 86860 and PSDTX1188

Emission Limitations

1. This permit covers only those sources of emissions listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates," and those sources are limited to the emission limits and other conditions specified in that attached table. In addition, this permit authorizes all emissions from planned maintenance, startup, and shutdown (MSS) activities associated with facilities or groups of facilities that are authorized by this permit. **(02/13)**

Federal Applicability

2. The electric arc furnace (EAF) and melt shop building shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on Standards of Performance for New Stationary Sources (NSPS) in Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), promulgated for Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels constructed after August 17, 1983, Subparts A and AAa.

3. These facilities shall comply with all applicable requirements of the U.S. EPA regulations on National Emission Standards for Hazardous Air Pollutants for Source Categories in 40 CFR Part 63 promulgated for Electric Arc Furnace Steelmaking Facilities, Subparts A and YYYYY and Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources, Subparts A and HHHHHH.

Fuel Standards

4. Fuel for the ladle preheater, mandrel preheat furnace, quench furnace, rotary hearth furnace, tempering furnace, tundish preheater, and VD boiler shall be pipeline-quality, sweet natural gas. Use of any other fuel will require prior approval of the Executive Director of the Texas Commission on Environmental Quality (TCEQ). **(06/11)**

   Upon request of the TCEQ Executive Director or the TCEQ Regional Director or any local air pollution control program having jurisdiction, the holder of this permit shall provide a sample and/or an analysis of the fuels used in these facilities or shall allow air pollution control program representatives to obtain a sample for analysis.

Opacity/Visible Emissions Limitations

5. In accordance with the EPA Test Method (TM) 9 or equivalent, opacity of emissions from the Rotary Hearth Furnace Emission Point No. (EPN) RHFS and, in accordance with NSPS Subpart AAa § 60.272a(2), opacity of emissions from the EAF baghouse stack EPN EBS shall not exceed 3 percent averaged over a six-minute period, except for those periods described in Title 30 Texas Administrative Code §§ 101.201 and 101.211 (30 TAC §§ 101.201 and 101.211). **(06/11)**

6. In accordance with the U.S. EPA TM 9 or equivalent, opacity of emissions from EPNs LWS, LSTBS, MPFS, QFS, TFS, VDBS, and HRLDS shall not exceed 5 percent averaged over a six-minute period, except for those periods described in 30 TAC §§ 101.201 and 101.211. **(07/12)**

7. In accordance with the U.S. EPA TM 9 or equivalent, opacity of fugitive emissions due solely to EAF operations from the melt shop building, in accordance with NSPS Subpart AAa § 60.272a(3), shall not exceed 6 percent averaged over a 6-minute period except for those periods described in 30 TAC §§ 101.201 and 101.211.

8. Except for emission points identified in Special Condition Nos. 5, 6, and 7, no visible emissions from the melt/continuous casting building, pipe mill building, roads, or travel areas shall leave the plant property. Visible emissions shall be determined by a standard of no visible emissions at the property line exceeding 30 seconds in duration in any six-minute period as determined using the EPA TM 22 or equivalent. If this condition is violated, additional controls or process changes may be required to limit visible particulate matter emissions.

Operational Limitations, Work Practices, and Plant Design

9. Plant operations and production are limited to the following:

   A. As represented, the molten steel throughput of the EAF, the Ladle Furnace (LF), and the continuous caster shall not exceed 149 tons per hour and 914,909 tons per year (tpy) of steel in any rolling 12-month period. Tons of steel shall be measured by operating hours and tons of steel produced as measured by the tap weight and averaged over a 24-hour day.

   B. Finished Rolled Pipe production shall not exceed 242.5 tons per hour and 752,650 tpy in any rolling 12-month period.

   C. Natural gas usage shall not exceed 2,835.1 million standard cubic feet (MMscf) per year in any rolling 12-month period. **(06/11)**

   D. The combined oil usage for the Steelmaking Workshop, Premium Connecting Line Workshop, and Hot Rolling Workshop shall not exceed 23,260 gallons per year. The foregoing total usage value does not apply to oil used in enclosed environments (e.g., transformer cooling oil, hydraulic oil, etc.) that will not cause emissions. **(06/11)**

   E. Welding electrode usage shall not exceed 10.0 tpy.

   F. Pipe Body Paint usage, including pipe UV coating, shall not exceed 233.7 tpy. **(07/12)**

G. Miscellaneous paint usage in the Hot Rolling and Pipe Processing Workshop and the Premium Connecting Line Workshop shall not exceed 10.5 tpy.

10. The fabric filter employed to control melt shop and EAF emissions and exhausting at EPN EBS shall achieve a maximum air flow of 980,870 dry standard cubic foot per minute (dscf/m) and an outlet grain loading ≤ 0.0018 grain per dry standard cubic foot (gr/dscf) front half and ≤ 0.0024 gr/dscf front and back half.

11. Dust collected by the EAF fabric filter shall be conveyed directly to a truck by an enclosed system for transport off property.

12. Replaced or used EAF fabric filter bags shall be placed in sealed containers and disposed of in a manner that will prevent any dust from becoming airborne.

13. Emissions from the lime silo, EAF elevated bunker, ladle furnace elevated lime bunker, and flux unloading/storage bin operation and exhausting at EPN LWS shall be exhausted to fabric filters having a design outlet grain loading not greater than 0.01 gr/dscf. **(07/12)**

14. Slag processing shall be performed in an enclosed building.

15. Slag yard piles (EPNs OSPS1, OSPSR1, OSPS2, and OSPSR2), slag yard drop point sources (EPNs ODPSR1, ODPS1, ODPS2, ODPS3, and ODPSR3), and indoor slag processing points and storage piles within the Steel making warehouse (EPNs ISPS, ISPSR1, ISPSR2, ISPSR3, IDPSR1, IDPS1, IDPSR2, IDPS2, and IDPSR3) shall be sprayed with water, as necessary, to control particulate matter emissions. **(07/12)**

16. Gas and particulate matter (PM) exhausted from the vacuum degassing tank shall be routed through an air cooling and dust collector system.

17. The following maintenance, startup, and shutdown (MSS) activities are authorized**: (02/13)**

A. Shutdown of the EAF for refractory inspection and maintenance;

B. Repair and replacement of refractory in the EAF;

C. Startup of the EAF following refractory inspection and maintenance/cold startup;

D. Replacement of bags on the steelmaking workshop baghouse;

E. Repair and replacement of refractory on ladles and tundishes;

F. Lubricating oil usage for equipment maintenance purposes; and

G. Miscellaneous welding operations for maintenance purposes.

18. The EAF and LF refractory repair shall be performed within the melt shop.

19. Canopy hoods shall be employed above the cone type piercing mill, the borax spraying and collection system, the entrance and exit to the PQF pipe mill, and the extracting mill to collect and route emissions to the sinter plate filter exhausting at EPN HRLDS.

20. A canopy hood shall be employed in the sizing mill to capture emission from pipe cutting. The emissions shall be exhausted thru the sinter plate filter exhausting at EPN HRLDS.

21. A dust absorbing unit that exhausts through a fabric filter and is then routed to EPN HRPPWV shall be employed between the pipe straightening process and the non-destructive testing (NDT) process to collect scale removed from the pipe.

22. Pipe finishing operations will include the application of lubricants to pipe threads, marking/printing pipes, and the application of UV coatings. **(07/12)**

23. The first sedimentation tank of the water treatment process shall employ an oil skimmer for collecting and removal of oil. The collected oil shall be transported off site to a reclamation facility.

24 All hood, duct, and collection systems shall be effective in capturing emissions from process equipment and in minimizing fugitive emissions from the buildings. The hood and duct systems shall be maintained free of holes, cracks, and other conditions that would reduce the collection efficiency of the emission capture system as represented in the application.

25. All air pollution abatement equipment shall be properly maintained and operated during the operation of these facilities. Cleaning and maintenance of the abatement equipment shall be performed as recommended by the manufacturer and as necessary so that the equipment efficiency can be adequately maintained.

26. Main plant roads, high traffic areas, and parking lots shall be paved. Low traffic areas and slag storage and processing areas shall be sprinkled with water or dust suppressant chemicals as necessary to control dust emissions.

27. This permit allows the use of VOC and non-VOC-containing compounds or products which meet the following conditions:

    A. The new or replacement compound/product shall serve the same basic function and the emissions shall be emitted from the same location as the replaced compound/product emissions.

    B. The hourly Effects Screening Level (ESL) for any new or replacement compound/product shall not be less than the hourly ESL value for the current compound/product and the emission rate (ER) for the replacement compound/product, <u>except</u> if the following condition is met:

       where: there is a direct substitution of one chemical for another

$$(ER2)/(ESL2) \leq (ER1)/(ESL1)$$

OR

where: the replacement has different constituents

$$\frac{(ER2a)}{(ESL2a)} + \frac{(ER2b)}{(ESL2b)} + \frac{(ER2n..)}{(ESL2n..)} \leq \frac{(ER1a)}{(ESL1a)} + \frac{(ER1b)}{(ESL1b)} + \frac{(ER1n..)}{(ESL1n..)}$$

where:

ER1 is the ER of current compound/product (chemical).

ER2 is the ER of the replacement compound/product (chemical).

ESL1 is the hourly ESL for the current compound/product (chemical shown on the Material Safety Data Sheets [MSDS]).

ESL2 is the hourly ESL for the replacement compound/product (chemical shown on the MSDS).

The hourly ESL values to be used in the formula above shall be taken from the values identified and used as the basis of analysis submitted as part of the permit application, the most current TCEQ ESL list, or TCEQ approved ESL. Special Condition No. 43 lists the compounds evaluated.

The 30-minute ESL value for any new chemical emitted that is not represented in the permit application is limited to the use of the TCEQ-approved ESL for the individual chemicals contained in the most current TCEQ ESL list. The use of new chemicals, not listed in the most current TCEQ ESL list, will require an amendment to this permit.

If the ESL is less than 15 $\mu g/m^3$ for any VOC and less than 50 $\mu g/m^3$ for non-VOC emissions, this condition does not apply. An amendment to this permit shall be required before any chemicals that are more toxic than this specified limit are introduced.

C. This condition allows for changes in compounds and/or compound formulations but does not allow for any increase in total emissions from any emission point.

Determination of Compliance

28. Upon being informed by the TCEQ Executive Director that the staff has documented visible emissions from this facility exceeding opacity limits stated in this permit, the holder of this permit may be required to conduct stack sampling analyses as appropriate or take immediate corrective action to demonstrate compliance.

29. Upon request by the Executive Director of the TCEQ or any local air pollution control program having jurisdiction, the holder of this permit shall perform net ground level concentration sampling and/or stack sampling as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere. Sampling must be conducted in accordance with appropriate procedures of the TCEQ Sampling Procedures Manual or in accordance with applicable EPA Code of Federal Regulations procedures. Any deviations from those procedures must be approved by the TCEQ Executive Director prior to sampling. The TCEQ Executive Director or his designated representative shall be afforded the opportunity to observe all such sampling. The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense.

Initial Determination of Compliance

30. The holder of this permit shall perform initial stack sampling and other testing to establish the actual quantities of air contaminants being emitted into the atmosphere. Unless otherwise specified by this condition, the sampling and testing shall be conducted in accordance with the methods and procedures specified in Sampling Requirements below. The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense. The TCEQ Executive Director or his designated representative shall be afforded the opportunity to observe all such sampling.

    A. Demonstrate compliance with the maximum allowable emission rates for the EAF Baghouse Stack (EPN EBS).

        (1) Air contaminants to be tested for include PM, particulate matter equal to or less than 10 microns in diameter ($PM_{10}$), nitrogen oxide ($NO_x$), carbon monoxide (CO), sulfur dioxide ($SO_2$), VOC, chromium, lead, and manganese.

        (2) Sampling to demonstrate maximum emissions for PM and $PM_{10}$ shall occur during the charging and melting processes. Sampling to demonstrate maximum emissions of CO shall occur during normal EAF operations.

    B. Demonstrate compliance with the stack flow rate for the EAF Baghouse Stack (EPN EBS) as represented in the permit Special Condition No. 10.

    C. Demonstrate compliance with the outlet grain loading limitation as specified in Special Condition No. 10.

D. Demonstrate compliance with requirements of the Federal Regulations identified in Special Condition Nos. 2 and 3.

Continuous Monitoring

31. The following monitoring actions shall be accomplished:

    A. The holder of this permit shall equip the fabric filter exhausting at EPN EBS with a Bag Leak Detection monitor. The monitoring device shall be installed, operated, calibrated, and maintained in a manner consistent with EPA Office of Air Quality Planning and Standards, Fabric Filter Bag Leak Detection Guidance (EPA-454/R-98-015).

    B. The holder of this permit shall perform daily visible emission observations at EPN LSTBS for the purpose of compliance assurance monitoring.

32. The holder of this permit shall install, calibrate, and maintain a device to monitor pressure drop in baghouses LWS, LSTBS, and EBS. **(07/12)**

    A. The monitoring device shall be calibrated in accordance with the manufacturer's specifications and shall be calibrated at least annually and shall be accurate to within a range of ± 0.5 inches water gauge pressure ( ± 125 Pascal's); or a span of ± 0.5 percent.

    B. The actual pressure drop for each baghouse shall be read and recorded at least one time per day. The minimum and maximum pressure drops for each baghouse will be determined following initial performance testing as required by this permit. The testing derived differential pressure values shall be provided in writing to the TCEQ Regional Office for inclusion in the files and shall be submitted as an alteration request for inclusion in the permit.

    C. Upon demonstration that operating conditions upon which the minimum or maximum differential pressure would ever need to be changed, the TCEQ Executive Director may grant a request to re-establish the differential pressure limit.

    D. The permitee shall continuously operate the differential pressure monitoring system(s) when the fabric filter baghouse(s) are operating.

33. For EPN HRLDS the permit holder shall perform visible emission observations at least once per calendar quarter using EPA TM 9 with remaining monthly periods during each calendar quarter being monitored and recorded using EPA TM 22. If visible emissions are observed, the permit holder shall conduct an opacity test using EPA TM 9.

34. The TCEQ Regional Office shall be notified as soon as possible after the discovery of any monitor malfunction which is expected to result in more than 24 hours of lost data. Supplemental visible emission monitoring may be required at the discretion of the appropriate TCEQ Regional Director in case of extended monitor downtime. Necessary corrective action shall be taken if downtime exceeds 5 percent of the (emission sources) operating hours in a quarter. Failure to complete any corrective action as directed by the TCEQ Regional Office may be deemed a violation of the permit.

35. After the initial demonstration of compliance, on-going stack sampling for PM, $PM_{10}$, $NO_x$, CO, VOC, $SO_2$, and lead (Pb) and the exhaust flow rate from of EAF Baghouse Stack (EPN EBS) shall be used to demonstrate continuous compliance. The holder of this permit may request the TCEQ Executive Director to approve alternate sampling techniques or other means to determine the opacity, rates, composition, and/or concentration of emissions in accordance with 30 TAC § 101.8. Sampling shall occur within 60 days of the anniversary date of the latest compliance sampling. Requests for additional time to perform sampling shall be submitted to the TCEQ Regional Office.

    A. Stack sampling shall be performed once annually during periods of normal operation, except as follows:

        (1) If, after two years of stack sampling, the average of the two annual stack sampling results for a pollutant is less than 70 percent of the maximum allowable emission rate, then compliance stack sampling for such pollutant may be conducted once every three years.

        (2) After initial testing, periodic Total PM/back half testing will not be required until a replacement EPA approved test for condensable PM testing has been adopted.

    B. Sampling required by this Special Condition shall demonstrate compliance with the lb/hr emission limits of the maximum allowable emission rates table (MAERT) and the exhaust flow rate limitation from of EAF Baghouse Stack (EPN EBS).

    C. Sampling required by this Special Condition shall be conducted in accordance with the methods, procedures, and notification protocol specified in Sampling Requirements below.

36. The holder of this permit shall perform monthly inspections to verify proper operation of capture systems to verify there are no holes, cracks and/or other conditions that would reduce the collection efficiency of the emission capture system as represented. If the results of the inspections indicate that the capture system is not operating properly, the permit holder shall take necessary corrective actions within five (5) days.

37. The holder of this permit may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging times specified, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances in order to avoid reporting deviations. All monitoring data shall be collected in accordance with the requirements specified in Title 40 Code of Federal Regulations § 64.7(c) [40 CFR § 64.7(c)].

38. If, as a result of stack sampling, compliance with the MAERT cannot be demonstrated, the holder of this permit shall adjust any operating parameters (including reduction of molten steel production rate) so as to comply with Special Condition No. 1 and the MAERT.

39. If the holder of this permit is required to adjust any operating parameters for compliance, then beginning no later than 60 days after the date of the test conducted, the holder of this permit shall submit to the TCEQ on a monthly basis, a record of adjusted operating parameters and daily records of molten steel production sufficient to demonstrate compliance with the MAERT. Daily records of molten steel production and operating parameters shall be distributed as follows:

    One copy to the appropriate TCEQ Regional Office.
    One copy to the TCEQ Office of Air, Air Permits Division in Austin.

Sampling Requirements

40. Sampling shall be conducted in accordance with the appropriate procedures of the TCEQ Sampling Procedures Manual, or applicable EPA Methods in 40 CFR Part 60, Appendix A.

    A. The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense. Sampling ports and platform(s) shall be installed on the exhaust stack according to the specifications set forth in the attachment entitled "Chapter 2, Stack Sampling Facilities" prior to stack sampling. Alternate sampling facility designs may be submitted for approval by the Executive Director of the TCEQ.

    B. Test methods to be used are as follows:

        (1) Appendix A, Method 5, modified to include back-half condensibles, per TCEQ Lab Method for the concentration of PM;

        (2) Appendix A, Method 5 or 17, for the filterable concentration of PM (front-half catch);

        (3) Appendix A, Method 6, 6a, 6c, or 8, for the concentration of $SO_2$;

        (4) Appendix A, Method 7E for the concentrations of $NO_x$ and $O_2$, or equivalent methods;

        (5) Appendix A, Method 9 for opacity;

        (6) Appendix A, Method 10 for the concentration of CO;

        (7) Appendix A, Method 22, for visual determination of fugitive emissions from material sources;

        (8) Appendix A, Method 25A, modified to exclude methane and ethane, for the concentration of VOC (to measure total carbon as propane);

(9) Appendix A, Method 29 for the concentration of chromium, lead, and manganese;

(10) Appendix M, Methods 201A and 202, or Appendix A, Reference Method 5, modified to include back-half condensibles, for the concentration of $PM_{10}$;

(11) Appendix M, Methods 201A or Appendix A, Reference Method 5, for the filterable concentration of $PM_{10}$ (front-half catch);

(12) Any variations from these procedures must be approved by the Executive Director of the TCEQ or his designated representative prior to sampling.

41. If testing is required, a pretest meeting concerning the required monitoring shall be held with personnel from the TCEQ before the required tests are performed. Air contaminants to be tested for will be defined and the TM to be used shall be determined at this pretest meeting.

A. Sampling shall occur within 60 days of being informed that testing other than that set forth specifically in this permit is required.

B. The TCEQ Corpus Christi Regional Office shall be notified not less than 45 days prior to sampling to schedule a pretest meeting. The notice to the TCEQ Corpus Christi Regional Office shall include:
(1) Date for pretest meeting.

(2) Date sampling shall occur.

(3) Name of firm conducting sampling.

(4) Type of sampling equipment to be used.

(5) Method or procedure to be used in sampling.

The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for submitting the test reports. The permit holder shall present at the pretest meeting the manner in which stack sampling will be executed in order to demonstrate compliance with emission.

C. A written proposed description of any deviation from sampling procedures specified in permit conditions or the TCEQ or EPA sampling procedures shall be made available to the TCEQ prior to the pretest meeting. The TCEQ Corpus Christi Regional Office shall approve or disapprove of any deviation from specified sampling procedures.

D. The permit holder shall be limited to the hourly EAF production rates established during testing (up to +10 percent). Additional stack testing shall be required when higher production rates are achieved.

E. The sampling report shall include the following:

(1) Plant production rate in tons of steel melted per hour

(2) The amperage of the fan motors shall be recorded along with the corresponding test value of volumetric air flow related to that fan motor for each fabric filter stack tested

(3) Fuel consumption rate in standard cubic feet per minute; and

(4) Any other pertinent parameters, as determined at the pretest meeting.

F. Once copy of the final sampling report shall be submitted within 60 days after sampling is completed. Sampling reports shall comply with the provisions of Chapter 14 of the TCEQ Sampling Procedures Manual. The reports shall be distributed as follows:

One copy to the TCEQ Corpus Christi Regional Office

Recordkeeping

42. The following records shall be maintained on-site and made available at the request of personnel from the TCEQ or any other air pollution control program having jurisdiction. Records shall be of sufficient detail to demonstrate compliance with authorized throughputs and operating parameters. These records shall be retained for a rolling 60-month period.

A. A daily record of operating hours and steel produced in tons per 24-hour period. From this data, average hourly production shall be calculated;

B. A record of annual steel production in tons on a rolling 12-month basis;

C. Records of pipe production in tons per hour and tons per year, based on a rolling 12-month basis;

D. Records of annual usage of natural gas, oils, welding electrodes, and paint used on a rolling 12-month basis;

E. Records of the inspection, maintenance, malfunction, and repair of abatement equipment. Inspections of capture systems and abatement devices shall be recorded as they occur;

F. All monitoring data and support information as specified in 30 TAC § 122.144;

G. Records of the differential pressure readings required for fabric filters listed in Special Condition No. 32B;

H. Records of visible emission readings for EPN's EBS, LSTBS, and HRLDS as required by NSPS, Continuous Assurance Monitoring (CAM), or Special Condition No. 33;

I. Records of monthly inspections required by Special Condition No. 36 and actions taken;

J. Records of the calibration of monitoring devices identified in Special Conditions No. 32A;

K. Records shall be kept in sufficient detail to allow emission rates of Hazardous Air Pollutants (HAPS) to be accurately determined from all emission points having the potential to emit HAPS. Using this recorded data, a report shall be produced for the emission of HAPs (in tons per year) over the previous 12 consecutive months.

The required records shall be kept with examples of the method of data reduction including units, conversion factors, assumptions, and the basis of the assumptions;

L. A record of the types of materials used and MSDS for each material;

M. Records to document compliance with changes in compound usage as specified in Special Condition No. 27.

Chemical List

43. The following compounds are approved for use in accordance with permit application representations and the permit Special Conditions.

| Compound | Compound |
|---|---|
| n-Butyl Acetate | Methyl Normal Propyl Ketone |
| Aliphatic Hydrocarbons (Stoddard Type) | Ethanol |
| 1-Butanol | Ethylbenzene |
| VM&P Naphtha | Toluene |
| Aliphatic Hydrocarbons | Isobutanol |

| | |
|---|---|
| Methyl Isobutyl Ketone | Methyl Ethyl ketone |
| 1-Methoxy 2-Propanol | Methyl Normal Amyl Ketone |
| Urea-Aldehyde Polymer | Propylene Glycol Monomethyl Ether Acetate |
| Modified Oxazolidone | 2, 4 Pentaedione |
| Ethyl 3-Epoxypropionate | Propylene Glycol |
| Methyl Isoamyl Ketone | Propylene Glycol Tert-Butyl Ether |
| 2-Propoxy Ethanol | Acetate Ester |
| Methyl-2-Pyrrolidone | Anti-float Agent |
| Acrylic Copolymer | Synthetic Wax |
| Fluoroalphatic Polymer Esters | Dimethyl Polysiloxane Copolymer |
| Polyether Polymer | Formaldehyde |
| p-Xylene or Para Xylene | Benzene |
| Methoxypropyltrimethoxysilane | Methyl Alcohol |
| Methyl Ethyl Ketoxime | Calcium Carboxylate |
| Styrene | Dimethyl Ethanolamine |
| Cellulose Acetate Butyrate | Ortho Cresyl Glycidyl Ether |
| Aromatic Diluent | Isopropyl Alcohol |
| Benzyl Alcohol | Barite |
| Zinc Phosphate | Titanium Dioxide |
| Zinc Dust | Tall Oil Alkyd Polymer |
| Salts from Alkylamides and Esters | Organosilane Ester |
| 2, 2, 4- Trimethyl-1, 2-Pentanedoil Monoisobutrate | |
| Acrylic Polymer | Propylene glycol Phenyl Ether |

| | |
|---|---|
| Tris-2,4,6- (dimethylaminomethyl) | Phenol |
| Iron oxide | 3-Ttimethoxysilypropane-1-thiol |
| Polyester Resin | Polyester Polyol |
| Polyalkene Glycol | N-beta-(aminoethyl)-gamma-Aminopropyltrimethoxyxilane |
| Alkyd Resin | Ceramic Microspheres |
| Phthalo Blue Pigment | Organic Resin |
| Zirconium-2-Ethylhexanoate | Iron Oxide Yellow |
| Dianisidine Orange 16 | Resin Solids |
| Wollastonite | Diglycidyl Ether of Bisphenol A Homopolymer |
| Pigment solids | Polyamide Resin |
| Liquid Polyamide Resin | Triethylenetetramine |
| Alkyd Polomer | Phenolic Resin |
| Polyamine Amide salt | Calcium Neodecanoate |
| Calcium 2-Ethylhexanoate | 2-Ethyl Hexanoate |
| Xylene | |

Dated: February 26, 2013

Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 86860 and PSDTX1188

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

Air Contaminants Data

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates (8) | |
|---|---|---|---|---|
| | | | lbs/hour | TPY (4) |
| LWS | Lime Warehouse Baghouse and Alloy Aggregate Baghouse Stack<br><br>FINs Description: Lime Silo and Flux Unloading and Storage Bin | PM | 5.98 | 26.17 |
| | | $PM_{10}$ | 5.98 | 26.17 |
| LSTBS | LF and Stock Tank Baghouse Stack<br><br>FINs Description: EAF Elevated Bunker, LF Elevated Lime Bunker, and Ladle Furnace (6) | PM | 4.54 | 19.89 |
| | | $PM_{10}$ | 4.54 | 19.89 |
| | | Cd | <0.001 | <0.004 |
| | | Cr | <0.006 | 0.02 |
| | | Pb | 0.04 | 0.17 |
| | | Mn | 0.03 | 0.15 |
| | | Hg | <0.0001 | <0.0004 |
| | | Si | <0.005 | 0.02 |
| | | Zn | 0.28 | 1.23 |

Emission Sources - Maximum Allowable Emission Rates

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates (8) | |
|---|---|---|---|---|
| | | | lbs/hour | TPY (4) |
| EBS | EAF Baghouse Stack (6) | $NO_x$ | 44.64 | 137.24 |
| | | CO | 595.24 | 1829.82 |
| | | VOC | 44.64 | 137.24 |
| | | $SO_2$ | 89.29 | 274.47 |
| | | $PM_{total}$ | 20.18 | 88.38 |
| | | $PM_{10\ total}$ | 20.18 | 88.38 |
| | | $PM_{front\ half}$ | 15.13 | 66.28 |
| | | $PM_{10\ front\ half}$ | 15.13 | 66.28 |
| | | Cd | <0.004 | 0.02 |
| | | Cr | 0.02 | 0.11 |
| | | Pb | 0.17 | 0.74 |
| | | Mn | 0.15 | 0.67 |
| | | Hg | <0.0004 | <0.002 |
| | | Si | 0.02 | 0.08 |
| | | Zn | 1.24 | 5.45 |
| RHFS | Rotary Hearth Furnace Stack | $NO_x$ | 44.63 | 67.91 |
| | | CO | 36.75 | 55.93 |
| | | VOC | 2.41 | 3.66 |
| | | $SO_2$ | 0.26 | 0.40 |
| | | PM | 3.33 | 5.06 |
| | | $PM_{10}$ | 3.33 | 5.06 |
| MPFS | Mandrel Preheat Furnace Stack | $NO_x$ | 1.33 | 5.83 |
| | | CO | 1.12 | 4.90 |

Emission Sources - Maximum Allowable Emission Rates

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates (8) | |
|---|---|---|---|---|
| | | | lbs/hour | TPY (4) |
| | | VOC | 0.07 | 0.32 |
| | | $SO_2$ | <0.01 | 0.03 |
| | | PM | 0.10 | 0.44 |
| | | $PM_{10}$ | 0.10 | 0.44 |
| QFS | Quench Furnace Stack | $NO_x$ | 6.85 | 11.89 |
| | | CO | 5.75 | 9.99 |
| | | VOC | 0.38 | 0.65 |
| | | $SO_2$ | 0.04 | 0.07 |
| | | PM | 0.52 | 0.90 |
| | | $PM_{10}$ | 0.52 | 0.90 |
| TFS | Tempering Furnace Stack | $NO_x$ | 5.71 | 9.51 |
| | | CO | 4.79 | 7.99 |
| | | VOC | 0.31 | 0.52 |
| | | $SO_2$ | 0.03 | 0.06 |
| | | PM | 0.43 | 0.72 |
| | | $PM_{10}$ | 0.43 | 0.72 |
| VDBS | VD Boiler Stack | $NO_x$ | 4.01 | 7.58 |
| | | CO | 3.37 | 6.37 |
| | | VOC | 0.22 | 0.42 |
| | | $SO_2$ | 0.02 | 0.05 |
| | | PM | 0.30 | 0.58 |
| | | $PM_{10}$ | 0.30 | 0.58 |

Emission Sources - Maximum Allowable Emission Rates

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates (8) | |
|---|---|---|---|---|
| | | | lbs/hour | TPY (4) |
| SMWV | Steel Making Workshop Vent<br><br>Ladle Preheater, Tundish Preheater, and Ladle Relining<br><br>(6) and (7) | $NO_x$ | 11.54 | 29.04 |
| | | CO | 11.31 | 30.02 |
| | | VOC | 1.24 | 4.01 |
| | | $SO_2$ | 0.08 | 0.20 |
| | | PM | 0.14 | 0.41 |
| | | $PM_{10}$ | 0.14 | 0.39 |
| | | Cd | <0.00001 | <0.0001 |
| | | Cr | <0.0022 | <0.0087 |
| | | Cr VI | <0.002 | <0.008 |
| | | Pb | <0.0001 | <0.0002 |
| | | Mn | <0.01 | <0.005 |
| | | Hg | <0.00001 | <0.00001 |
| | | Si | <0.00001 | <0.00001 |
| | | Zn | 0.0001 | <0.0005 |
| AAWV | Alloy Aggregate Warehouse Vent | PM | <0.01 | <0.01 |
| | | $PM_{10}$ | <0.01 | <0.01 |
| PCLWV | Premium Connecting Line Workshop Vent (7) | CO | 1.27 | 5.22 |
| | | VOC | 0.90 | 3.86 |
| | | PM | 0.09 | 0.38 |
| | | $PM_{10}$ | 0.09 | 0.38 |
| HRPPWV | Hot Rolling and Pipe Processing Workshop Vent (6) and (7) | CO | 1.44 | 6.21 |
| | | VOC | 1.76 | 7.20 |
| | | PM | 0.17 | 0.69 |

Emission Sources - Maximum Allowable Emission Rates

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates (8) | |
|---|---|---|---|---|
| | | | lbs/hour | TPY (4) |
| | | $PM_{10}$ | 0.17 | 0.69 |
| | | Cr | <0.003 | <0.012 |
| | | Cr VI | 0.002 | 0.008 |
| | | Mn | <0.01 | <0.006 |
| HRLDS | Hot Rolling Line Sinter Plate Filter Stack, Piercing Mill, Borax Spraying, PQF Pipe Mill, Extracting Mill, and PipeCutting FINs: HRL, BSCS, PM, EM, and SM | PM | 4.25 | 4.25 |
| | | $PM_{10}$ | 4.25 | 4.25 |
| ODPSS1 | Outdoor Drop Points, Scrap Steel by Truck 10 (5) | PM | 0.03 | 0.10 |
| | | $PM_{10}$ | 0.01 | 0.05 |
| ODPSS2 | Outdoor Drop Points Scrap Steel By Train 4 (5) | PM | 0.03 | 0.10 |
| | | $PM_{10}$ | 0.01 | 0.05 |
| ODPSR1 | Outdoor Drop Point Spent Refractory and Other Waste Storage Pile-1 (5) | PM | <0.01 | 0.02 |
| | | $PM_{10}$ | <0.01 | <0.01 |
| ODPS1 | Outdoor Drop Point Slag-1 (5) | PM | <0.01 | 0.01 |
| | | $PM_{10}$ | <0.01 | <0.01 |
| ODPSR2 | Outdoor Drop Point Spent Refractory and Other Waste Storage Pile-2 (5) | PM | 0.05 | 0.03 |
| | | $PM_{10}$ | 0.02 | 0.02 |
| ODPS2 | Outdoor Drop Point Slag-2*2 (5) | PM | <0.01 | <0.01 |
| | | $PM_{10}$ | <0.01 | <0.01 |
| ODPSR3 | Outdoor Drop Point Spent Refractory and Other Waste Storage Pile-3 (5) | PM | <0.01 | 0.02 |
| | | $PM_{10}$ | <0.01 | <0.01 |

Emission Sources - Maximum Allowable Emission Rates

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates (8) | |
|---|---|---|---|---|
| | | | lbs/hour | TPY (4) |
| ODPS3 | Outdoor Drop Point Slag-3 (5) | PM | <0.01 | <0.01 |
| | | $PM_{10}$ | <0.01 | <0.01 |
| OSPSS | Outdoor Storage Piles, Scrap Steel (5) | PM | 0.23 | 1.00 |
| | | $PM_{10}$ | 0.11 | 0.50 |
| OSPFST | Outdoor Storage Pile, First Sedimentation Tank (5) | PM | <0.01 | <0.01 |
| | | $PM_{10}$ | <0.01 | <0.01 |
| OSPS1 | Outdoor Storage Pile, Slag-1 (5) | PM | 0.06 | 0.26 |
| | | $PM_{10}$ | 0.03 | 0.13 |
| OSPSR1 | Outdoor Storage Pile Spent Refractory and Other Waste-1 (5) | PM | 0.23 | 1.00 |
| | | $PM_{10}$ | 0.11 | 0.50 |
| OSPS2 | Outdoor Storage Pile, Slag-2 (5) | PM | 0.06 | 0.26 |
| | | $PM_{10}$ | 0.03 | 0.13 |
| OSPSR2 | Outdoor Storage Pile, Spent Refractory and Other Waste-2 (5) | PM | 0.23 | 1.00 |
| | | $PM_{10}$ | 0.11 | 0.50 |
| N6CCT | Contact Cooling Tower No. 6 (5) | PM | 0.03 | 0.14 |
| | | $PM_{10}$ | 0.03 | 0.14 |
| N7CCT | Contact Cooling Tower No. 7 (5) | PM | 0.02 | 0.07 |
| | | $PM_{10}$ | 0.02 | 0.07 |
| RSCCT | Rolling Steel Contact Cooling Tower (5) | PM | 0.03 | 0.14 |
| | | $PM_{10}$ | 0.03 | 0.14 |
| PPCCT | Pipe Processing Contact Cooling Tower (5) | PM | 0.03 | 0.14 |
| | | $PM_{10}$ | 0.03 | 0.14 |

Emission Sources - Maximum Allowable Emission Rates

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates (8) | |
|---|---|---|---|---|
| | | | lbs/hour | TPY (4) |
| SMWTF | Steel Making Water Treatment Facility (5) | VOC | 0.10 | 0.10 |
| | | PM | 0.10 | 0.10 |
| | | $PM_{10}$ | 0.10 | 0.10 |
| RSWTF | Rolling Steel Water Treatment Facility (5) | VOC | 0.10 | 0.10 |
| | | PM | 0.10 | 0.10 |
| | | $PM_{10}$ | 0.10 | 0.10 |
| GWTF | Graphite Water Treatment Facility (5) | VOC | 0.10 | 0.10 |
| | | PM | 0.10 | 0.10 |
| | | $PM_{10}$ | 0.10 | 0.10 |
| CMSCS1 | Caster Spray Chamber Stack 1 | NOx | 0.18 | 0.55 |
| | | CO | 0.58 | 1.75 |
| | | VOC | 0.02 | 0.07 |
| | | PM | 0.07 | 0.22 |
| | | $PM_{10}$ | 0.07 | 0.22 |
| | | Pb | 0.001 | 0.002 |
| CMSCS2 | Caster Spray Chamber Stack 2 | NOx | 0.18 | 0.55 |
| | | CO | 0.58 | 1.75 |
| | | VOC | 0.02 | 0.07 |
| | | PM | 0.07 | 0.22 |
| | | $PM_{10}$ | 0.07 | 0.22 |
| | | Pb | 0.001 | 0.002 |
| UVCS1 | UV Coating Stack 1 | VOC | <0.01 | 0.01 |
| | | PM | 0.01 | 0.04 |

Emission Sources - Maximum Allowable Emission Rates

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates (8) | |
|---|---|---|---|---|
| | | | lbs/hour | TPY (4) |
| | | $PM_{10}$ | 0.01 | 0.04 |
| UVCS2 | UV Coating Stack 2 | VOC | <0.01 | 0.01 |
| | | PM | 0.01 | 0.04 |
| | | $PM_{10}$ | 0.01 | 0.04 |
| UVCS3 | UV Coating Stack 3 | VOC | <0.01 | 0.01 |
| | | PM | 0.01 | 0.04 |
| | | $PM_{10}$ | 0.01 | 0.04 |
| UVCS4 | UV Coating Stack 4 | VOC | <0.01 | 0.01 |
| | | PM | 0.01 | 0.04 |
| | | $PM_{10}$ | 0.01 | 0.04 |
| VDSS | VD Steam Stack | $NO_x$ | 0.73 | 2.19 |
| | | CO | 29.10 | 87.43 |
| | | VOC | 0.09 | 0.26 |
| | | $SO_2$ | 0.02 | 0.04 |
| | | PM | 0.29 | 0.87 |
| | | PM10 | 0.29 | 0.87 |
| ALL | ALL | HAPS | <0.45 | <1.92 |

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.
(2) Specific point source name. For fugitive sources, use area name or fugitive source name.
(3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
$NO_x$ - total oxides of nitrogen
$SO_2$ - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including $PM_{10}$ and $PM_{2.5}$, as represented
$PM_{10}$ - total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$, as represented

Emission Sources - Maximum Allowable Emission Rates

$PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter
CO - carbon monoxide
Cd - cadmium
Cr - chromium
CR VI - chromium valence +6
Pb - lead
Mn - manganese
Hg - mercury
Si - silicon
Zn - zinc
HAP - hazardous air pollutant as listed in § 112(b) of the Federal Clean Air Act or Title 40 Code of Federal Regulations Part 63, Subpart C

(4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
(5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
(6) Speciated metals/HAPS are included in the PM and $PM_{10}$ values.
(7) The PM/$PM_{10}$ may include trace amounts of non-speciated metals including, but not limited to Cr, Pb, and Mn.
(8) Planned maintenance, startup, and shutdown (MSS) emissions are included.

Date: August 22, 2013